WEEKLY WEATHER AND CROP BULLETIN

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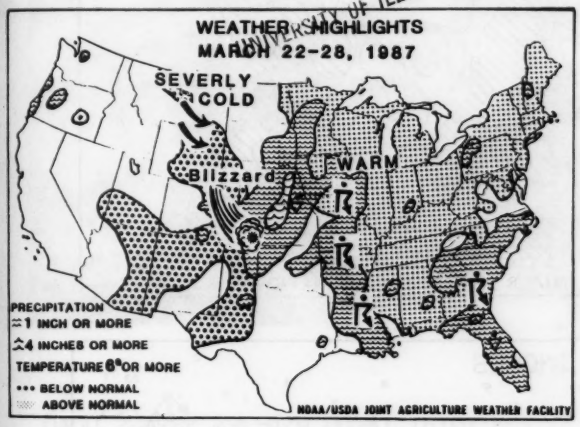
National Weather Summary

MARCH 22 to 28, 1987



HIGHLIGHTS. Storms moving northward through the Great Plains caused blizzard conditions in the High Plains and moderate to heavy rain from eastern Oklahoma to Minnesota. Showers and thunderstorms developed through most of the Mississippi Valley, across the South, and from Florida to southern New England. Lighter showers covered most of the East. Late in the week, a severely cold arctic air mass pushed into Montana and pushed southward and eastward. Snow and strong gusty wind accompanied and proceded the leading edge of the very cold air. The week ended with another blizzard from western Kansas to eastern Wyoming. This time, it was much colder. Temperatures were unusually warm throughout the east, but at week's end much colder air was advancing southward and eastward.

SUNDAY...A storm moving through the Southwest triggered showers and thunderstorms from Texas to southwestern Minnesota. Heavy snow and strong wind covered the mountains in the Southwest, the central and northern Rockies, and the High Plains from Texas to Montana. Unusually warm weather reached from eastern Texas through the Great Lake.

MONDAY...Severe weather lingered in Oklahoma and Kansas but moved eastward to the Mississippi River. More snow fell in the High Plains of Kansas and Nebraska. Another storm brought rain to the Pacific coast. Snow covered the mountains and spread to the central Plateau. Warm weather reached through the Midwest and the east coast.

TUESDAY...Blizzard conditions continued to sweep the High Plains from western Kansas into the Dakotas. Rain covered the eastern portion of the central and northern Plains while showers and thunderstorms reached from the Southeast into the Ohio Valley. Scattered thundershowers and mountain snow extended from southern California into New Mexico.

WEDNESDAY...Snow tapered off in the High Plains, but high winds continued to whip the snow into the air. Rain fell from the eastern portion of the northern plains to New England and through the East Coast States. Occasional thunderstorms occurred along the east coast and in the upper Ohio Valley. Another storm in the Southwest brought showers to New Mexico and western Texas.

THURSDAY...Snow fell in most of the Rockies and pushed into western Texas. Heavy showers and thunderstorms developed over Florida as a storm developed in the Gulf of Mexico. Rain fell in the Great Lakes region, and showers reached from the Ohio Valley through New England. Unusually warm weather continued over the South and East.

FRIDAY...Widespread rain and showers covered most of the East Coast States with thunderstorms in the Southeast and along the Mid-Atlantic Coast. Early in the day, a severely cold arctic air mass pushed into Montana and began spreading rapidly southward and eastward. Strong, cold winds howled through the northern and central Rockies and Plains. Snow accompanied and preceded the cold air, giving the area a protective blanket as the cold air moved in.

SATURDAY...The severely cold air plunged southward through the Rockies to eastern Colorado and eastward through the Dakotas. Gusty wind and snow caused blizzard conditions again from Kansas into Iowa. Moderate to heavy rain fell in the warmer air in eastern Iowa, Missouri, and Illinois. As the severely cold air blasted into the Plains, very warm weather covered the South and the East.

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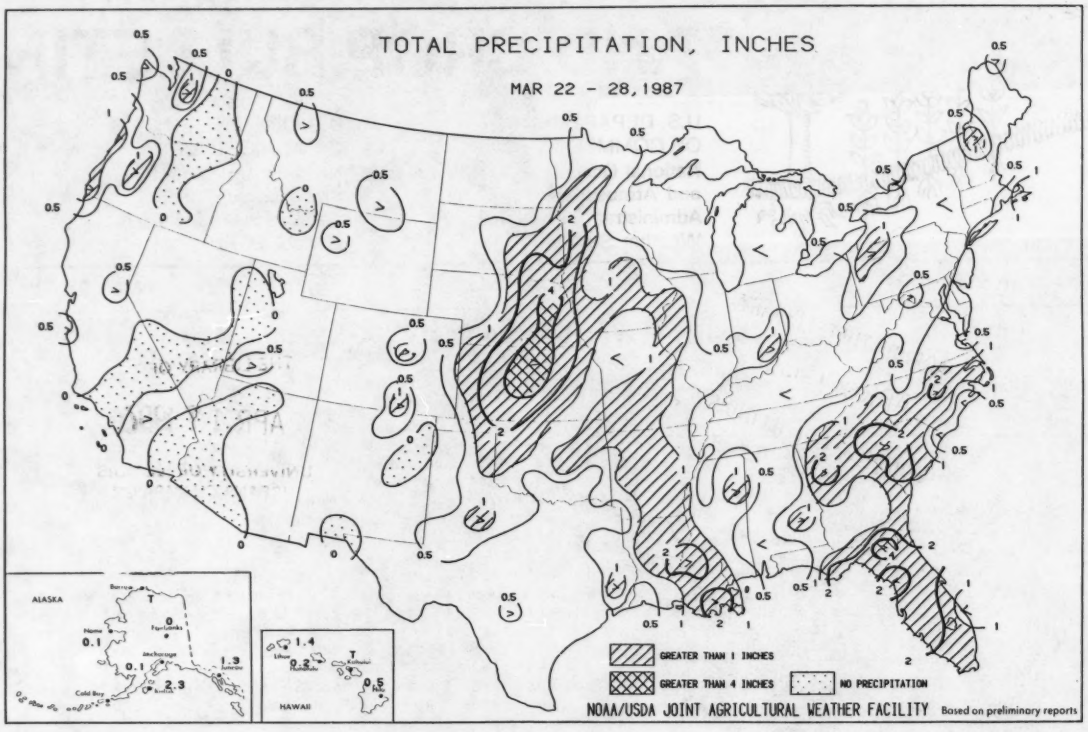
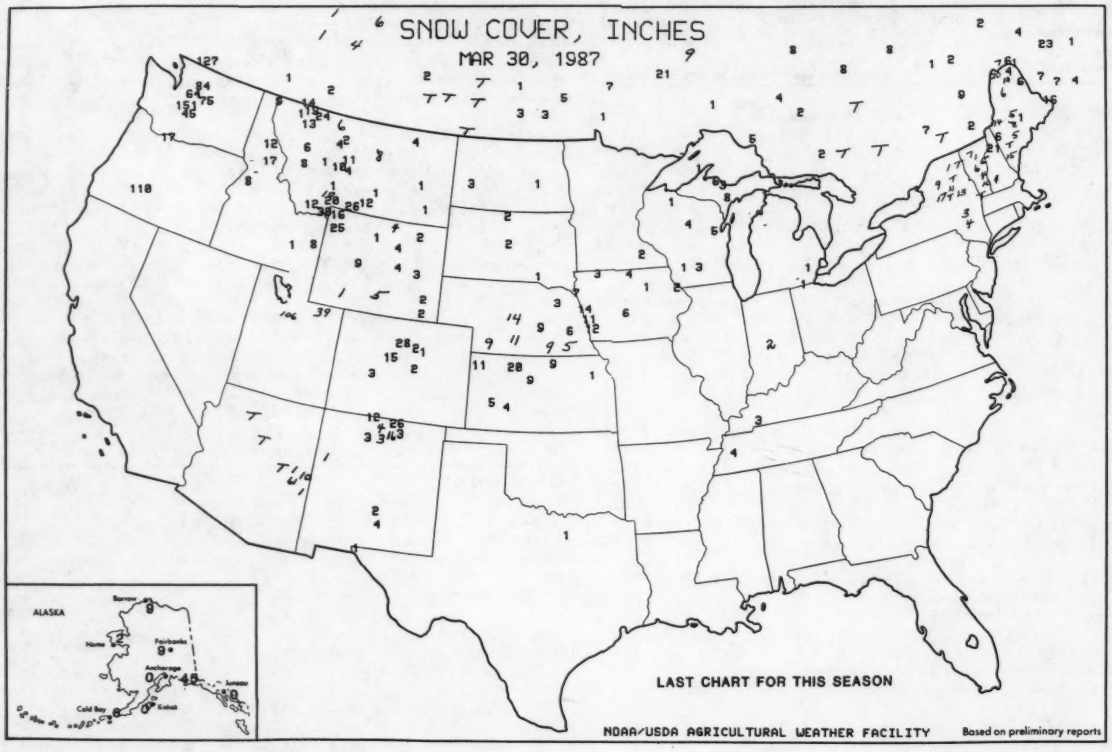
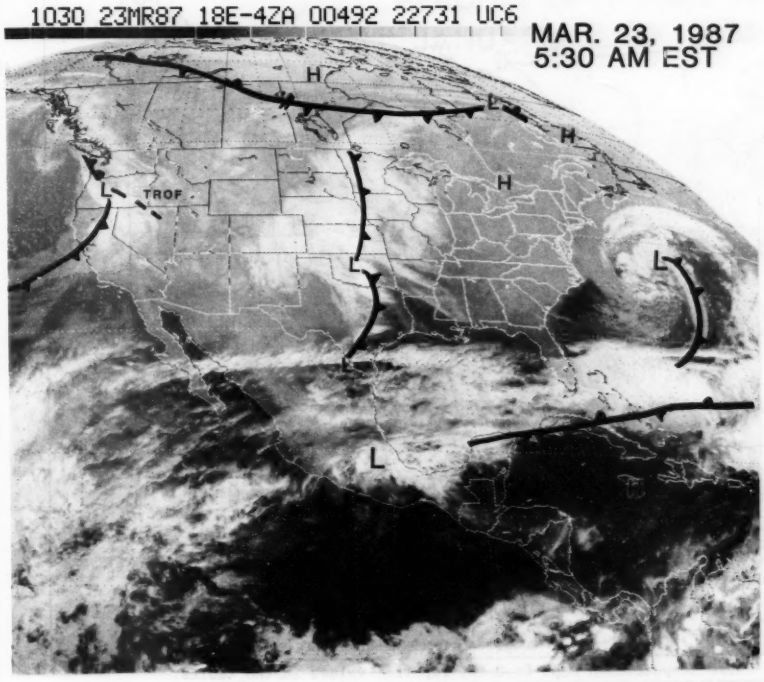
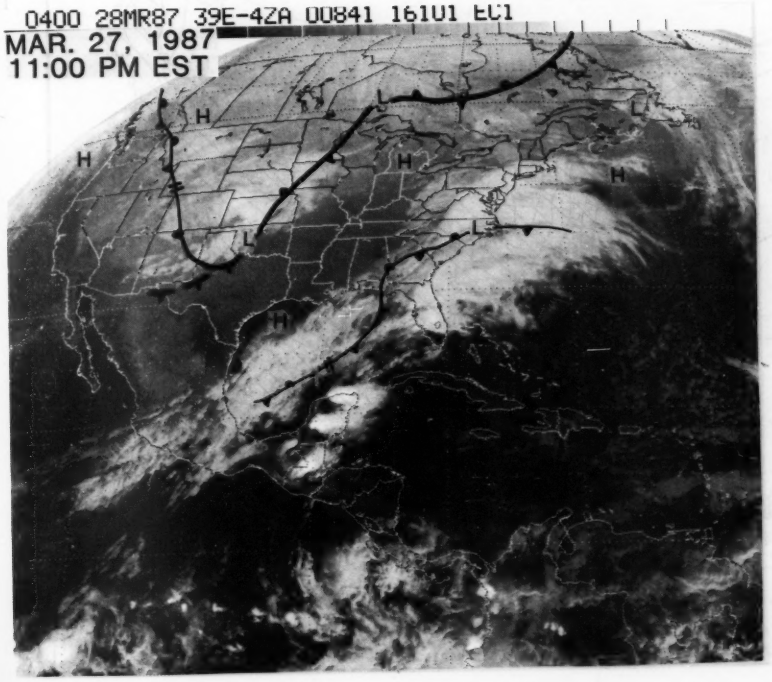

TOTAL PRECIPITATION, INCHES
MAR 22 - 28, 1987
ALASKA
HAWAII
GREATER THAN 1 INCHES
GREATER THAN 4 INCHES
NO PRECIPITATION
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


SNOW COVER, INCHES
MAR 30, 1987
ALASKA
LAST CHART FOR THIS SEASON
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports



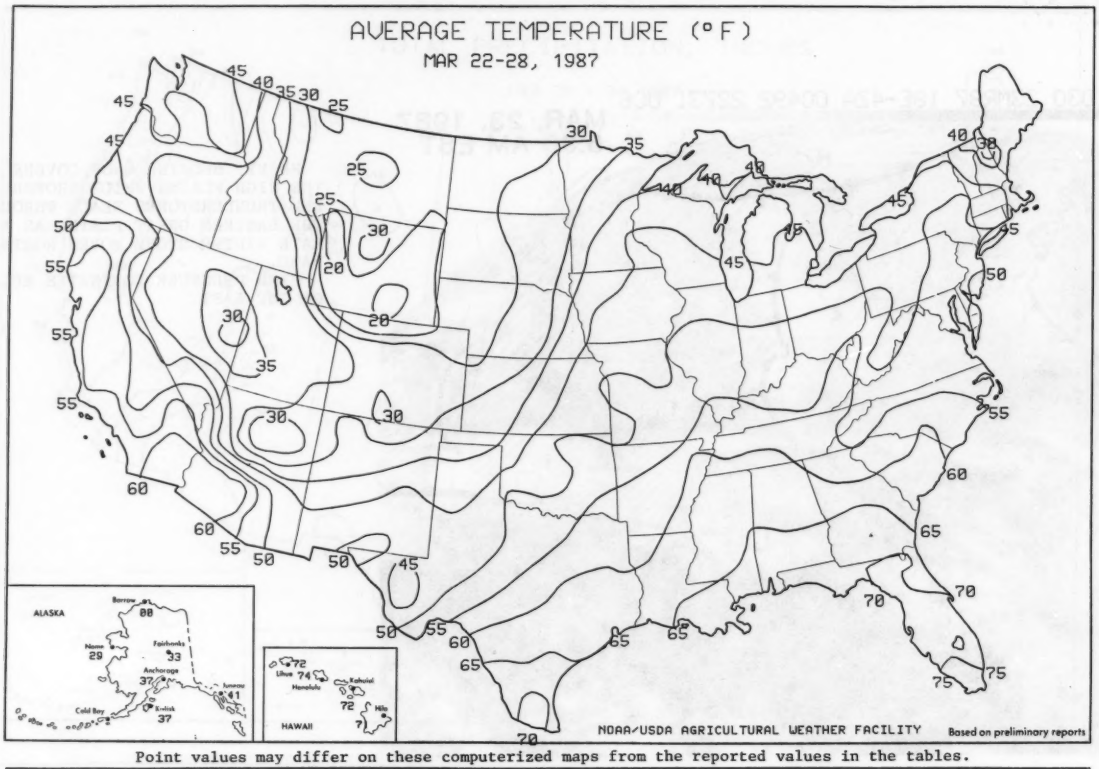
HEAVY, BLOWING SNOW COVERS THE HIGH PLAINS WHILE SHOWERS AND THUNDERSTORMS REACH THROUGH THE EASTERN GREAT PLAINS AS A LATE WINTER STORM MOVES NORTHWARD.

HIGH PRESSURE DOMINATES MUCH OF THE EAST.

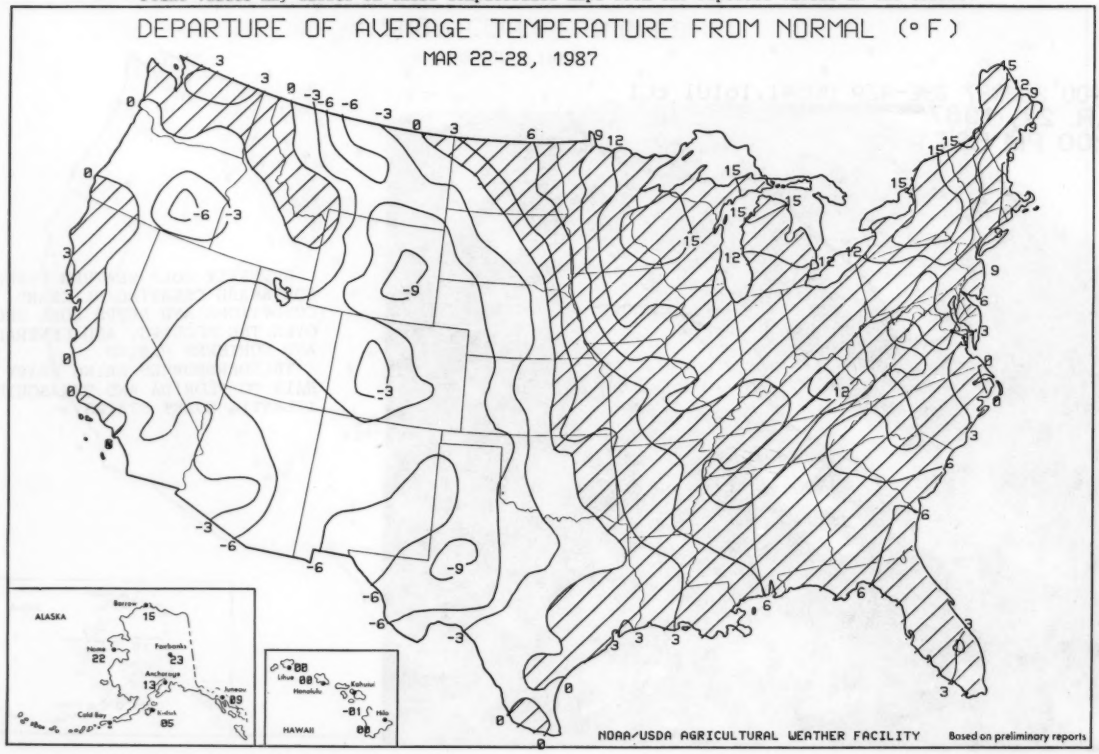


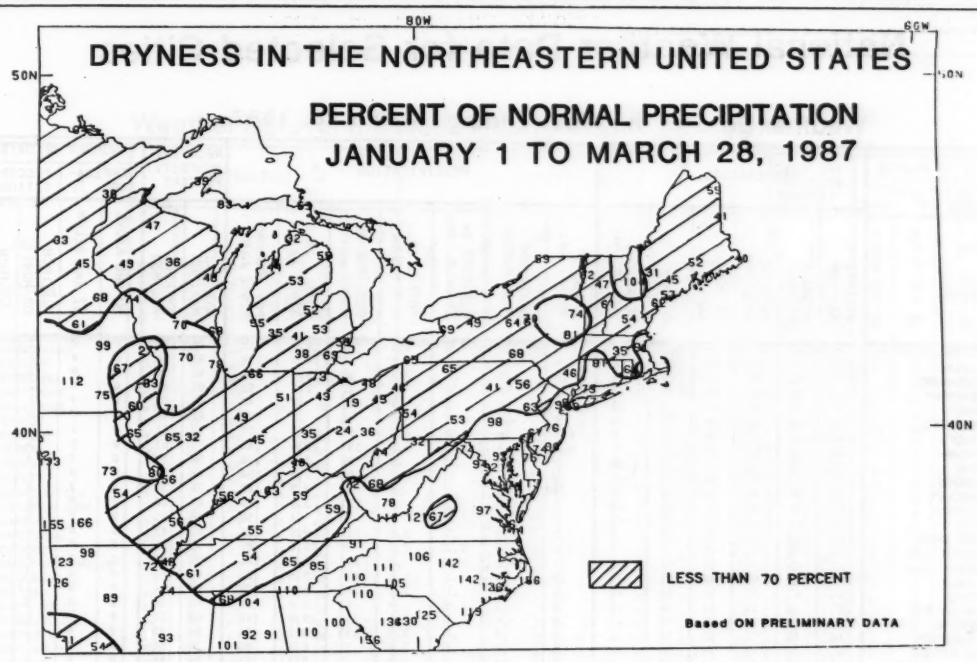
SEVERELY COLD WEATHER PUSHES SOUTHWARD CREATING BLIZZARD CONDITIONS AND DUMPS MORE SNOW OVER THE ROCKIES, AND CENTRAL AND NORTHERN PLAINS.

THUNDERSHOWERS BRING HEAVY RAIN TO FLORIDA AND THE SOUTH ATLANTIC COAST STATES.

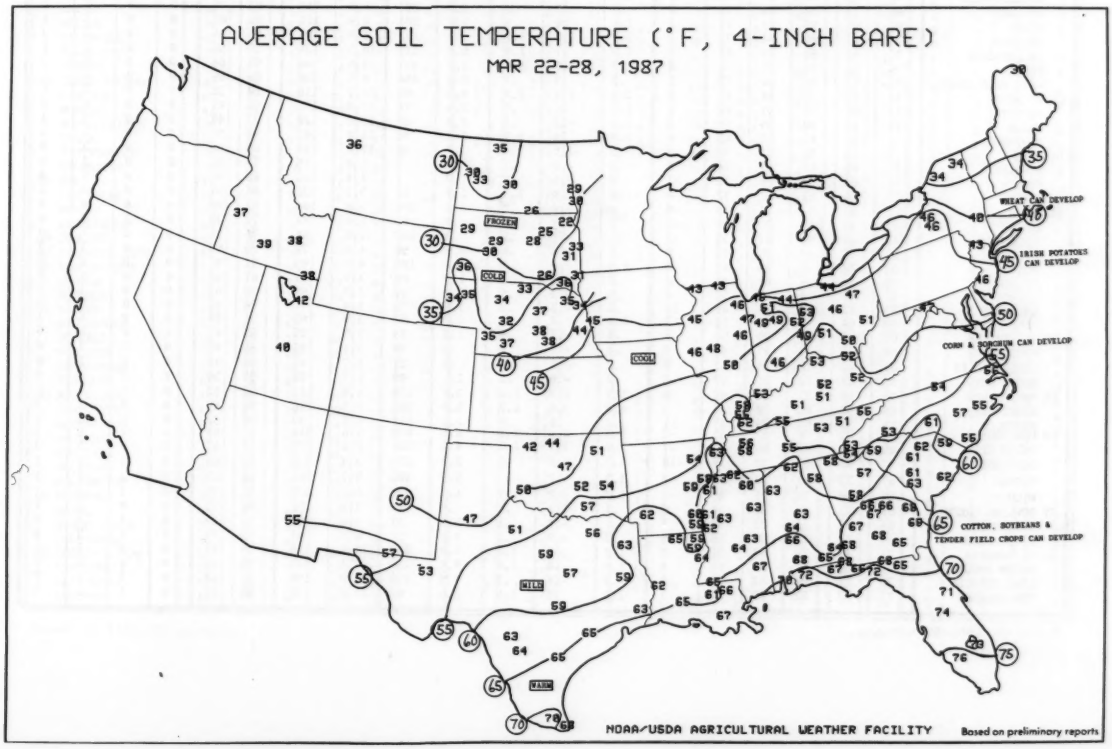


Point values may differ on these computerized maps from the reported values in the tables.





The map above shows the precipitation accumulated since the first of the year, expressed as a percentage of normal. Most of the Great Lakes, Ohio Valley, Tennessee Valley, and the Northeast have been significantly drier than normal.



National Weather Data for Selected Cities

Weather Data for the Week Ending March 28, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 1	PCT. NORMAL SINCE MAR. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	75	48	80	43	62	5	.3	-1.2	.3	2.8	47	14.7	92	84	29	0	0	1	0
MOBILE	78	55	84	52	67	4	.4	-1.1	.2	4.4	76	18.9	124	91	38	0	0	3	0
MONTGOMERY	78	52	82	48	65	6	.8	-.6	.7	2.7	50	19.6	140	92	35	0	0	2	1
AK ANCHORAGE	43	30	47	24	37	11	.1	0	.1	.1	22	2.0	91	92	48	0	6	2	0
BARROW	7	-7	21	-20	0	13	T	0	T	T	27	.2	40	86	77	0	7	1	0
FAIRBANKS	46	19	49	14	33	19	0	-.1	0	T	0	.8	62	81	32	0	7	0	0
JUNEAU	45	36	52	29	41	8	1.3	.6	1.0	1.8	60	9.0	87	92	61	0	1	5	1
KODIAK	43	32	46	28	37	5	2.3	1.4	1.0	5.7	157	20.6	143	93	63	0	5	5	2
NOME	35	23	37	17	29	20	.1	0	.1	.5	94	1.9	106	90	59	0	7	3	0
AZ PHOENIX	71	49	77	44	60	-2	T	-.2	T	.3	38	3.0	150	48	15	0	0	1	0
PRESCOTT	50	26	58	22	38	-6	.1	-.2	.1	.4	28	3.9	83	76	30	0	7	2	0
TUCSON	65	39	74	35	52	-7	.2	0	.2	.8	132	3.0	150	67	20	0	0	2	0
YUMA	75	51	80	46	63	-3	0	0	0	T	0	.4	50	48	15	0	0	0	0
AR FORT SMITH	66	43	83	35	54	1	.7	-.2	.5	3.9	111	9.8	126	89	43	0	0	4	0
LITTLE ROCK	69	48	79	42	58	3	1.2	0	1.2	2.3	56	10.6	89	75	45	0	0	1	1
CA BAKERSFIELD	66	42	73	39	54	-4	T	-.2	T	.9	113	3.4	121	89	37	0	0	0	0
EUREKA	57	45	60	40	51	3	.3	-.8	.2	5.6	121	15.5	92	87	66	0	0	3	0
FRESNO	65	43	72	40	54	-2	.1	-.3	.1	2.4	164	5.7	108	94	44	0	0	1	0
LOS ANGELES	67	48	74	44	58	-1	T	-.3	T	.9	57	2.8	39	84	36	0	0	0	0
REDDING	68	40	74	29	54	-2	.4	-.6	.4	7.0	154	19.0	98	80	27	0	1	1	0
SACRAMENTO	66	41	72	33	54	-1	.4	0	.4	2.9	155	8.3	94	84	38	0	0	1	0
SAN DIEGO	65	50	70	46	58	-2	.1	-.2	.1	1.0	71	4.3	86	79	56	0	0	1	0
SAN FRANCISCO	66	46	73	40	56	3	.2	-.4	.2	2.0	82	8.3	81	90	44	0	0	1	0
CO DENVER	41	23	58	15	32	-8	.6	.3	.3	1.3	124	3.2	145	83	40	0	7	3	0
GRAND JUNCTION	47	27	52	22	37	-8	.1	-.1	.1	1.9	294	3.4	189	78	32	0	7	2	0
PUEBLO	47	24	60	17	36	-7	.2	0	.1	.5	79	2.5	227	85	33	0	7	2	0
CT BRIDGEPORT	62	39	68	34	51	10	.3	-.6	.3	1.9	54	7.1	73	85	40	0	0	2	0
HARTFORD	64	35	73	31	49	9	.1	-.8	.1	1.8	49	8.5	82	86	33	0	3	2	0
DC WASHINGTON	67	46	71	38	56	7	.1	-.7	.1	.8	24	7.8	92	84	39	0	0	1	0
FL APALACHICOLA	73	62	76	53	67	5	3.2	2.3	2.7	6.6	181	16.8	154	97	73	0	0	4	1
DAYTONA BEACH	76	61	80	52	69	3	2.5	1.9	1.4	5.0	184	13.8	168	97	69	0	0	4	2
JACKSONVILLE	77	59	84	49	68	4	1.5	.8	1.0	4.8	153	15.3	159	96	57	0	0	3	1
KEY WEST	80	72	84	64	76	0	.4	.2	.3	9.0	804	10.5	219	92	75	0	0	3	0
MIAMI	80	69	85	63	75	2	1.1	.6	.5	3.4	204	6.9	121	90	62	0	0	3	1
ORLANDO	79	63	86	54	71	3	3.7	3.0	3.2	5.8	193	8.8	106	96	64	0	0	2	2
TALLAHASSEE	78	60	84	45	69	7	1.9	.7	1.0	5.7	111	18.3	124	96	58	0	0	3	2
TAMPA	79	64	84	55	72	4	2.7	2.0	1.6	6.8	217	11.6	140	95	64	0	0	2	2
WEST PALM BEACH	79	67	86	60	73	2	.9	.3	.7	6.2	254	8.5	110	89	59	0	0	3	1
GA ATLANTA	71	51	78	44	61	6	2.4	1.1	2.2	4.5	84	16.2	110	88	38	0	0	3	1
AUGUSTA	73	50	79	37	62	4	1.7	.6	.7	3.3	74	19.4	155	95	49	0	0	4	2
MACON	76	54	80	39	65	6	1.0	-.2	.7	3.3	69	17.2	128	97	48	0	0	3	1
SAVANNAH	73	57	83	46	65	4	1.2	.3	1.2	3.3	96	16.4	167	94	53	0	0	3	1
HI HILO	79	64	81	61	72	0	.5	-2.5	.4	3.7	30	17.0	48	88	56	0	0	3	0
HONOLULU	82	66	87	62	74	0	.2	-.6	.1	.2	5	1.4	15	79	46	0	0	2	0
KAHULUI	81	63	87	59	72	-1	T	-.5	T	.2	7	4.4	46	80	46	0	0	1	0
LIHUE	78	66	81	61	72	0	1.4	.4	1.3	1.4	34	5.3	38	84	54	0	0	2	1
ID BOISE	52	27	57	21	39	-4	T	-.2	T	1.8	196	3.8	106	82	29	0	6	0	0
LEWISTON	53	35	58	29	44	-1	T	-.2	T	.4	43	1.4	44	74	35	0	2	0	0
POCATELLO	47	24	51	17	35	-2	.1	-.1	.1	.8	102	2.6	96	76	26	0	6	1	0
IL CHICAGO	57	40	69	35	48	8	.1	-.6	.1	1.3	56	4.0	78	90	53	0	0	3	0
MOLINE	56	40	74	35	48	8	1.5	.8	.7	2.6	108	4.4	83	91	57	0	0	5	2
PEORIA	58	44	76	41	51	10	.8	.1	.4	1.6	62	3.9	71	81	50	0	0	5	0
QUINCY	58	44	74	41	51	8	.5	-.3	.5	1.5	52	3.7	66	88	63	0	0	3	1
ROCKFORD	57	41	70	36	49	11	.5	-.2	.2	1.6	72	3.4	71	86	51	0	0	3	0
SPRINGFIELD	58	44	74	42	51	7	1.0	.2	.5	1.7	63	3.9	65	91	54	0	0	4	1
IN EVANSVILLE	65	43	77	39	54	6	.4	-.7	.4	1.4	33	5.6	55	85	41	0	0	1	0
FORT WAYNE	60	37	73	27	49	9	.1	-.7	0	.8	30	3.4	51	88	46	0	1	3	0
INDIANAPOLIS	61	42	70	35	52	8	.2	-.6	.2	.9	27	3.7	45	88	44	0	0	2	0
SOUTH BEND	57	37	70	28	47	8	.2	-.6	.1	1.1	40	4.7	66	95	50	0	2	4	0
IA DES MOINES	58	40	73	32	49	10	1.9	1.3	1.5	2.7	139	4.5	113	92	52	0	1	3	1
SIOUX CITY	49	32	65	20	41	3	4.0	3.6	1.7	5.9	385	6.5	210	98	69	0	4	5	3
WATERLOO	55	38	68	29	47	11	1.2	.6	.8	2.3	116	3.6	97	95	52	0	1	3	1
KS CONCORDIA	50	33	70	22	41	-2	5.3	4.8	2.6	8.1	490	9.6	310	93	68	0	1	6	3
DODGE CITY	46	30	69	18	38	-7	3.0	2.6	1.1	4.1	321	6.1	277	97	67	0	6	5	3
GOODLAND	37	23	51	12	30	-10	1.7	1.4	.8	2.5	275	3.8	238	97	68	0	7	6	1
TOPEKA	57	37	74	32	47	2	1.3	.7	.7	5.9	305	9.7	249	94	65	0	2	4	1
WICHITA	55	36	74	25	45	-2	1.7	1.2	1.7	4.0	220	8.8	267	91	59	0	1	2	1
KY BOWLING GREEN	69	42	76	36	55	6	.1	-1.1	.1	.6	13	7.4	54	86	31	0	0	1	0
LEXINGTON	66	42	71	32	54	7	.2	-.9	.1	1.6	37	6.6	59	82	32	0	1	3	0
LOUISVILLE	66	44	74	37	55	6	.3	-.9	.2	1.6	37	6.8	63	82	35	0	0	2	0
LA ALEXANDRIA	73	49	79	43	61	0	1.2	0	1.2	5.9	127	20.4	139	89	41	0	0	1	1
BATON ROUGE	77	53	82	49	65	2	1.9	.8	1.8	5.4	130	20.4	149	90	35	0	0	2	1
LAKE CHARLES	75	51	80	43	63	0	.3	-.4	.3	4.4	156	16.9	156	92	43	0	0	1	0
NEW ORLEANS	77	57	82	49	67	3	1.9	.9	1.8	2.6	62	18.8	131	95	45	0	0	2	1

Based on 1951-80 normals.

Weather Data for the Week Ending March 28, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 1	PCT. NORMAL SINCE MAR. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	73	44	84	36	58	-1	.5	-.4	.5	1.1	33	11.2	103	92	35	0	0	1	0
ME CARIBOU	53	32	64	26	43	15	.1	-.5	.1	1.0	47	3.6	55	97	50	0	2	1	0
PORTLAND	52	33	64	28	42	7	.2	-.8	.2	1.5	43	6.8	62	93	55	0	3	1	0
MD BALTIMORE	67	42	70	34	54	8	.2	-.6	.2	.5	15	8.6	92	74	30	0	0	2	0
SALISBURY	64	37	72	30	50	3	1.0	.1	.9	2.4	65	11.7	113	96	37	0	4	2	1
MA BOSTON	54	38	65	33	46	5	.2	-.8	.1	2.3	61	10.3	90	93	57	0	0	3	0
CHATHAM	47	36	60	33	42	3	1.0	.1	.8	3.5	95	13.7	112	93	69	0	0	3	1
MI ALPENA	56	31	61	22	43	12	.2	-.2	.2	.8	46	2.6	55	98	52	0	4	1	0
DETROIT	59	38	68	29	48	10	.2	-.5	.1	1.1	49	4.0	69	88	46	0	1	2	0
FLINT	58	37	68	26	47	11	.4	-.2	.3	1.0	52	2.6	53	90	50	0	2	2	0
GRAND RAPIDS	57	33	71	25	45	8	.2	-.4	.1	1.0	43	2.0	34	91	49	0	4	3	0
HOUGHTON LAKE	56	30	66	20	43	12	.3	-.2	.2	.7	41	2.4	55	94	45	0	4	2	0
LANSING	57	34	69	24	46	9	.2	-.4	.2	.7	35	2.1	41	87	46	0	3	3	0
MARQUETTE	51	32	62	26	41	11	.2	-.3	.2	1.3	69	4.3	84	90	52	0	4	3	0
MUSKEGON	56	34	72	27	45	9	.3	-.3	.2	1.2	52	3.4	55	93	48	0	3	4	0
SAULT STE. MARIE	50	32	57	24	41	13	.1	-.4	.1	.7	41	3.3	58	94	50	0	4	2	0
MN ALEXANDRIA	43	28	57	10	36	7	1.2	.9	1.0	1.3	125	2.6	100	94	64	0	4	2	1
DULUTH	46	31	59	15	39	11	.2	-.3	.1	.4	26	1.4	39	87	45	0	4	2	0
INT'L FALLS	40	27	52	5	34	8	.7	.4	.7	.9	92	1.6	64	90	60	0	4	2	1
MINNEAPOLIS	54	38	63	27	46	12	.2	-.3	.1	.6	43	1.4	45	88	45	0	1	2	0
ROCHESTER	53	36	63	27	44	11	.5	.1	.3	1.2	77	2.1	68	95	59	0	3	4	0
MS GREENWOOD	76	51	84	45	64	6	.4	-1.1	.4	4.6	82	14.3	93	91	34	0	0	1	0
JACKSON	78	49	85	43	63	5	.8	-.6	.7	4.9	98	19.8	139	98	33	0	0	2	1
MERIDIAN	80	48	85	44	64	5	.5	-1.1	.3	2.6	43	22.7	146	95	28	0	0	2	0
MO CAPE GIRARDEAU	69	46	77	35	57	--	.2	-1.0	.2	1.7	38	5.8	55	89	48	0	0	1	0
COLUMBIA	56	43	76	39	49	3	1.2	.4	.6	1.8	61	4.8	73	99	71	0	0	5	1
KANSAS CITY	58	40	77	34	49	3	.9	.2	.4	2.8	118	5.8	121	92	59	0	0	4	0
SAINT LOUIS	60	45	75	41	52	6	.7	-.1	.3	2.0	69	5.4	79	88	52	0	0	3	0
SPRINGFIELD	60	41	74	33	50	3	1.6	.7	1.3	4.0	129	11.3	166	90	55	0	0	4	1
MT BILLINGS	37	22	50	5	29	-7	.6	.3	.3	1.4	154	1.9	76	93	50	0	7	6	0
GLASGOW	34	20	42	10	27	-5	.4	.3	.4	1.3	492	1.5	167	91	66	0	7	2	0
GREAT FALLS	34	17	47	-1	26	-8	.4	.1	.2	1.8	225	2.1	84	86	57	0	7	5	0
HAVRE	34	18	43	3	26	-7	.2	0	.1	.3	70	.6	40	89	64	0	6	2	0
HELENA	39	18	52	3	28	-6	.2	.1	.1	1.2	195	1.2	71	87	45	0	7	3	0
KALISPELL	42	24	51	11	33	-1	.4	.2	.3	3.0	383	4.2	124	88	48	0	7	2	0
MILES CITY	35	21	47	10	28	-7	T	-.2	T	.7	143	.9	53	88	60	0	7	0	0
MISSOULA	44	24	53	14	34	-3	.2	0	.1	1.3	175	1.9	66	86	38	0	7	3	0
NE GRAND ISLAND	39	29	48	18	34	-5	2.3	1.8	1.1	6.0	447	6.7	258	94	75	0	5	4	2
LINCOLN	49	32	69	21	41	1	3.8	3.3	1.3	6.3	368	6.9	203	95	72	0	4	6	4
NORFOLK	42	29	55	19	36	-2	4.1	3.7	2.0	7.3	537	8.3	319	97	71	0	4	6	3
NORTH PLATTE	36	24	50	15	30	-8	.4	.2	.2	1.7	176	3.4	179	94	65	0	6	5	0
OMAHA	51	34	69	21	43	2	1.9	1.4	.7	4.2	249	4.9	148	92	72	0	2	5	2
SCOTTSBLUFF	38	22	57	11	30	-8	.1	-.2	0	1.7	194	3.9	229	86	46	0	7	2	0
VALENTINE	34	22	46	8	28	-8	.4	.2	.2	.6	75	2.0	143	83	61	0	7	3	0
NV ELY	42	18	53	12	30	-5	T	-.2	T	.9	115	2.3	105	90	39	0	7	1	0
LAS VEGAS	64	42	71	38	53	-4	T	-.1	T	.5	132	2.1	162	47	15	0	0	1	0
RENO	52	28	60	21	40	-2	.2	0	.1	.8	119	2.1	75	80	25	0	5	2	0
WINNEMUCCA	50	26	57	16	38	-2	T	-.1	T	1.3	232	2.3	110	86	33	0	6	2	0
NH CONCORD	57	30	69	25	44	8	.1	-.6	.1	1.2	46	4.2	53	95	42	0	6	2	0
NJ ATLANTIC CITY	63	34	70	27	49	5	.8	-.1	.6	2.2	59	10.0	96	96	38	0	4	3	1
NM ALBUQUERQUE	50	28	55	25	39	-9	T	-.1	T	.1	16	1.3	108	71	25	0	6	1	0
CLOVIS	56	32	72	23	44	-5	.2	.1	.2	.2	43	2.1	150	72	30	0	2	2	0
ROSWELL	60	35	72	30	48	-6	.1	.1	.1	.2	44	2.4	200	70	25	0	1	2	0
NY ALBANY	63	37	72	29	50	12	T	-.7	T	1.4	51	5.9	81	93	38	0	3	1	0
BINGHAMTON	61	41	67	36	51	16	.4	-.3	.4	1.3	48	5.0	68	79	36	0	0	1	0
BUFFALO	59	38	71	30	48	12	.6	-.1	.5	1.8	67	5.5	69	96	46	0	1	4	0
NEW YORK	64	44	69	38	54	10	.3	-.6	.3	2.7	73	8.9	91	83	37	0	0	2	0
ROCHESTER	57	37	66	26	47	10	.4	-.1	.4	.9	40	3.4	49	96	44	0	3	3	0
SYRACUSE	62	36	67	29	49	12	.3	-.4	.3	1.4	50	5.1	64	93	38	0	2	3	0
NC ASHEVILLE	65	40	73	31	52	3	.8	-.3	.4	2.1	49	11.8	110	90	40	0	1	4	0
CHARLOTTE	69	47	76	35	58	4	.8	-.3	.4	2.5	57	12.6	106	89	41	0	0	3	0
GREENSBORO	67	43	73	34	55	4	.5	-.4	.3	2.4	69	11.0	106	92	38	0	0	2	0
HATTERAS	60	43	73	32	51	-2	2.0	1.1	2.0	4.5	125	19.4	155	96	65	0	1	2	1
NEW BERN	70	42	79	34	56	1	.6	-.2	.5	3.1	95	14.2	126	97	48	0	0	2	0
RALEIGH	69	42	75	30	55	3	.7	-.1	.7	2.5	76	14.6	142	92	38	0	1	1	1
WILMINGTON	71	45	79	33	58	2	.1	-.8	.1	1.9	52	12.8	119	97	45	0	0	3	0
ND BISMARCK	35	26	42	10	30	0	.2	0	.1	1.3	227	3.1	207	91	68	0	5	5	0
FARGO	38	27	47	12	33	4	.3	.1	.2	.4	62	1.6	100	93	69	0	4	5	0
GRAND FORKS	37	26	46	9	32	5	.2	-.1	.1	.4	57	1.9	100	91	67	0	5	2	0
WILLISTON	35	22	44	7	29	-1	.2	0	.1	1.6	333	2.1	150	92	66	0	7	4	0
OH AKRON-CANTON	61	37	68	26	49	9	.2	-.6	.2	1.2	40	3.5	45	88	40	0	1	1	0
CINCINNATI	64	41	70	32	53	7	.3	-.6	.3	2.0	58	4.5	48	80	36	0	1	2	0
CLEVELAND	59	36	71	24	47	7	.2	-.5	.2	1.0	37	3.5	48	90	47	0	2	2	0
COLUMBUS	66	39	69	26	53	9	.1	-.7	.1	.2	5	1.9	24	85	34	0	1	1	0

Based on 1951-80 normals.

Weather Data for the Week Ending March 28, 1987

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR. 1	PCT. NORMAL SINCE MAR. 1	TOTAL, IN., SINCE JAN. 1	PCT. NORMAL SINCE JAN. 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	64	38	70	24	51	8	.3	-.5	.2	.5	17	2.5	34	88	38	0	1	2	0
TOLEDO	59	36	73	24	47	8	.1	-.5	.1	2.0	87	4.4	72	91	47	0	2	2	0
YOUNGSTOWN	60	35	69	25	48	9	.2	-.6	.2	1.2	42	3.6	46	91	41	0	3	1	0
OK OKLAHOMA CITY	58	39	75	27	48	-4	.8	.3	.8	2.3	126	8.9	217	87	49	0	1	1	1
TULSA	60	41	79	31	51	-2	1.0	.2	.8	2.2	80	9.3	160	85	44	0	1	3	1
OR ASTORIA	54	34	59	28	44	-1	.5	-.1	.4	8.5	327	23.9	241	96	55	0	2	3	0
BURNS	48	27	54	22	37	-1	.1	-.1	.1	1.5	160	3.8	97			0	7	1	0
MEDFORD	61	32	67	28	47	0	.2	-.2	.2	1.4	84	6.5	90	91	29	0	4	2	0
PENDLETON	52	34	57	30	43	-2	T	-.2	T	1.4	145	3.5	92	78	39	0	3	0	0
PORTLAND	56	36	60	32	46	-1	.4	-.3	.4	4.8	148	14.4	108	93	49	0	1	2	0
SALEM	56	31	61	27	44	-2	.5	-.4	.5	3.9	100	15.1	97	96	47	0	6	2	0
PA ALLENTOWN	66	37	69	31	51	10	.2	-.7	.2	1.2	34	6.2	63	87	32	0	2	3	0
ERIE	55	35	70	26	45	8	.7	0	.6	1.3	51	4.5	64	92	52	0	2	3	1
HARRISBURG	63	38	67	30	50	6	.3	-.5	.1	.9	30	6.2	70	83	32	0	1	2	0
PHILADELPHIA	68	41	73	35	55	10	.2	-.7	.2	.5	15	6.3	67	88	32	0	0	2	0
PITTSBURGH	63	39	69	32	51	9	.8	0	.8	1.6	51	4.6	55	74	33	0	1	1	1
SCRANTON	63	39	69	32	51	12	.1	-.5	.1	.4	18	3.7	56	86	33	0	1	2	0
RI PROVIDENCE	56	35	70	32	46	5	.5	-.5	.3	2.3	61	7.4	64	97	47	0	2	3	0
SC CHARLESTON	72	55	82	45	64	5	1.8	.8	1.8	3.9	97	15.7	148	96	52	0	0	2	1
COLUMBIA	73	47	80	34	60	3	2.5	1.4	1.3	4.0	86	17.8	136	96	39	0	0	3	2
FLORENCE	72	51	80	39	62	5	1.2	.3	.5	2.7	72	13.3	124	92	36	0	0	3	1
GREENVILLE	68	45	78	35	56	3	2.5	1.2	1.7	3.5	65	15.5	110	93	46	0	0	3	2
SD ABERDEEN	38	28	46	15	33	1	.5	.2	.4	1.7	194	2.9	145	94	66	0	4	2	0
HURON	38	28	44	15	33	-1	1.9	1.5	1.2	4.8	452	6.1	277	92	68	0	5	4	1
RAPID CITY	36	20	51	10	28	-7	.2	0	.1	1.1	131	2.9	153	91	53	0	7	3	0
SIOUX FALLS	43	30	51	17	36	1	1.6	1.2	1.1	3.3	236	3.7	132	91	66	0	4	4	1
TN CHATTANOOGA	72	47	76	38	59	7	.6	-.8	.4	3.7	64	17.2	110	93	29	0	0	3	0
KNOXVILLE	71	40	74	30	56	3	.7	-.5	.4	2.4	47	11.7	85	95	28	0	1	3	0
MEMPHIS	72	51	82	46	62	7	.4	-.9	.4	2.6	53	10.1	73	78	34	0	0	2	0
NASHVILLE	73	45	77	38	59	7	.2	-1.1	.2	.8	16	7.2	53	85	27	0	0	1	0
TX ABILENE	62	40	78	33	51	-8	.5	.2	.3	1.5	156	5.6	193	86	40	0	0	3	0
AMARILLO	52	30	74	18	41	-8	.4	.3	.4	.9	122	3.0	167	90	42	0	6	1	0
AUSTIN	72	51	79	45	61	-2	.4	0	.3	1.4	91	5.1	93	80	36	0	0	3	0
BEAUMONT	76	51	79	41	64	1	.1	-.6	.1	.9	32	16.7	150	92	37	0	0	1	0
BROWNSVILLE	78	58	83	51	68	-2	.1	0	.1	.6	135	5.3	166	97	57	0	0	3	0
CORPUS CHRISTI	76	57	81	45	66	-2	T	-.2	T	.4	61	8.7	229	93	46	0	0	1	0
DEL RIO	72	51	79	41	61	-5	T	-.2	T	.8	143	4.4	232	65	47	0	0	2	0
EL PASO	64	38	69	32	51	-7	T	-.1	T	.4	154	1.0	91	60	17	0	1	0	0
FORT WORTH	65	42	77	35	54	-5	.2	-.4	.2	1.6	78	6.5	116	87	44	0	0	2	0
GALVESTON	71	58	73	54	65	1	.2	-.2	.2	.4	20	9.1	126	83	43	0	0	1	0
HOUSTON	76	51	81	42	63	-1	.1	-.5	.1	.9	37	7.6	83	88	34	0	0	1	0
LUBBOCK	57	33	78	22	45	-8	.4	.2	.3	.4	53	2.4	141	93	35	0	3	2	0
MIDLAND	59	36	76	27	47	-10	.6	.5	.5	1.2	280	3.3	236	88	36	0	2	3	0
SAN ANGELO	62	39	78	34	51	-9	.1	-.1	.1	1.7	264	6.8	324	85	41	0	0	4	0
SAN ANTONIO	72	50	78	42	61	-3	.1	-.3	.1	1.1	95	7.0	156	85	38	0	0	2	0
VICTORIA	77	53	82	46	65	-1	.1	-.2	.1	.4	36	7.1	134	89	34	0	0	1	0
WACO	69	44	78	37	57	-4	.1	-.4	.1	1.5	88	5.5	102	89	40	0	0	2	0
WICHITA FALLS	63	39	75	30	51	-5	.9	.4	.5	1.9	119	7.8	223	88	43	0	1	2	1
UT BLANDING	43	23	51	19	33	-8	.2	0	.2	.6	84	3.1	103	92	55	0	7	1	0
CEDAR CITY	43	22	54	16	32	-9	.7	.5	.3	1.9	201	3.7	154	93	41	0	7	3	0
SALT LAKE CITY	48	29	54	25	39	-4	.2	-.2	.2	1.5	101	4.4	105	76	37	0	6	1	0
VT BURLINGTON	57	33	68	29	45	12	.2	-.4	.2	1.0	50	3.4	62	94	49	0	4	3	0
VA NORFOLK	63	41	76	33	52	1	.3	-.6	.3	2.0	58	15.1	145	94	47	0	0	1	0
RICHMOND	69	40	77	32	54	4	.6	-.2	.3	1.2	37	9.3	97	89	33	0	1	2	0
ROANOKE	66	40	73	32	53	4	.9	.1	.5	2.2	67	11.3	122	93	36	0	1	3	1
WA COLVILLE	53	29	60	26	41	2	.3	.1	.3	3.6	325	5.8	121	86	53	0	6	1	0
QUILLAYUTE	54	35	58	27	45	1	.5	-2.0	.3	13.3	122	35.7	95	94	52	0	2	3	0
SEATTLE-TACOMA	56	38	60	35	47	2	.1	-.7	.1	5.5	169	13.6	101	88	44	0	0	2	0
SPOKANE	49	28	54	24	39	-1	T	-.3	T	2.2	176	4.6	87	89	36	0	6	1	0
YAKIMA	56	29	61	23	43	-1	T	-.1	T	1.0	180	2.7	100	80	29	0	5	0	0
WV BECKLEY	62	39	66	28	50	6	.2	-.7	.1	1.0	29	7.9	77	80	30	0	1	3	0
CHARLESTON	70	43	73	30	56	9	.1	-.8	.1	.4	10	6.9	68	81	27	0	2	3	0
HUNTINGTON	68	42	73	31	55	6	.2	-.8	.1	1.1	31	7.0	72	82	32	0	1	3	0
PARKERSBURG	66	40	72	27	53	7	.5	-.3	.5	.7	23	3.8	44	82	34	0	1	3	0
WI GREEN BAY	54	34	66	27	44	11	.3	-.2	.3	1.0	59	1.8	47	93	48	0	4	1	0
LA CROSSE	57	41	67	33	49	13	.4	-.1	.3	1.2	70	2.6	74	83	44	0	0	3	0
MADISON	56	36	67	28	46	11	.3	-.3	.1	1.5	79	2.8	70	91	48	0	2	3	0
MILWAUKEE	52	39	57	33	45	10	.1	-.5	.1	1.1	49	3.5	67	85	54	0	0	3	0
WAUSAU	53	35	65	29	44	13	.3	-.2	.3	.6	36	1.3	37	85	41	0	?	1	0
WY CASPER	31	14	45	6	23	-12	.1	-.2	0	1.4	161	4.2	221	91	58	0	?	3	0
CHEYENNE	31	16	49	6	24	-10	.2	0	.1	1.3	144	2.3	144	87	59	0	7	6	0
LANDER	37	19	49	8	28	-6	.4	.1	.1	2.1	222	4.7	224	88	44	0	7	5	0
SHERIDAN	35	19	49	-1	27	-7	.6	.3	.2	1.3	138	2.5	104	97	60	0	7	4	0
PR SAN JUAN	86	75	90	73	80	3	T	-.5	T	5.2	266	7.6	109	80	67	3	0	1	0

Based on 1951-80 normals.

Heating Degree Day Summary Table

CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 3-28-1987
ACCUMULATIONS ARE FROM JULY 1
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

STATE CITY	CALL	WEEK TOTAL	WEEK DEV FROM NORM	WEEK DEV FROM L YR	CUM TOTAL	CUM DEV FROM NORM	CUM DEV FROM L YR	CUM DEV FROM NORM PRCT	CUM DEV FROM L YR PRCT
AL BIRMINGHAM	BHM	21	-47	-48	2475	-218	31	-8	1
AL MOBILE	MOB	1	-31	-46	1549	-93	47	-6	3
AL MONTGOMERY	MGM	2	-45	-52	1990	-189	25	-9	1
AK ANCHORAGE	ANC	197	-73	-58	7580	-1348	-649	-15	-8
AK BARROW	BRW	458	-97	-97	14812	-946	-379	-6	-2
AK FAIRBANKS	FAI	225	-134	-144	11044	-1325	-505	-11	-4
AK JUNEAU	JNU	166	-61	-27	6221	-1071	-717	-15	-10
AK KODIAK	ADQ	192	-22	-26	6048	-754	-538	-11	-8
AK NOME	OME	250	-144	-171	10090	-1208	-66	-11	-1
AZ FLAGSTAFF	FLG	246	44	112	5929	122	657	2	12
AZ PHOENIX	PHX	34	-1	34	872	-505	118	-37	16
AZ PRESCOTT	PRC	188	44	127	4049	-59	651	-1	19
AZ TUCSON	TUS	89	43	89	1459	-164	320	-10	28
AZ WINSLOW	INW	182	56	119	4199	-88	462	-2	12
AZ YUMA	YUM	16	0	16	661	-279	183	-30	38
AR FORT SMITH	FSM	77	-11	35	2952	-314	-53	-10	-2
AR LITTLE ROCK	LRI	58	-27	13	2772	-212	89	-7	3
CA BAKERSFIELD	BFL	73	21	60	2083	153	165	8	9
CA EUREKA	EKA	97	-22	16	2945	-558	-55	-16	-2
CA FRESNO	FAT	76	8	63	2039	-366	183	-15	10
CA LOS ANGELES	LAX	50	-1	30	955	-289	100	-23	12
CA SACRAMENTO	SAC	78	2	67	2261	-145	158	-6	8
CA SAN DIEGO	SAN	50	8	36	936	-94	171	-9	22
CA SAN FRANCISCO	SFO	63	-21	28	2138	-317	110	-13	5
CA STOCKTON	SCK	80	9	49	2283	-97	19	-4	1
CO DENVER	DEN	228	53	142	4923	-166	43	-3	1
CO GRAND JUNCTION	GJT	195	52	127	4877	-180	483	-4	11
CO PUEBLO	PUB	204	50	123	4811	14	76	0	2
CT BRIDGEPORT	BDR	98	-70	-57	4685	-18	-31	0	-1
CT HARTFORD	BDL	108	-66	-46	5445	42	56	1	1
DE WILMINGTON	ILG	85	-55	-51	4324	-93	338	-2	3
DC WASHINGTON	DCA	61	-51	-43	3764	9	115	0	3
FL APALACHICOLA	AQQ	3	-21	-45	1024	-345	-194	-25	-16
FL DAYTONA BEACH	DAB	3	-13	-36	624	-256	-199	-29	-24
FL FORT MEYER	FMY	0	-3	-17	181	-259	-139	-59	-43
FL JACKSONVILLE	JAX	4	-21	-45	1221	-155	-23	-11	-2
FL KEY WEST	EYW	0	0	-8	31	-85	-80	-73	-72
FL MIAMI	MIA	0	0	-14	105	-93	-132	-47	-56
FL ORLANDO	MCO	0	-7	-28	400	-255	-216	-39	-35
FL TALLAHASSEE	TLH	0	-32	-60	1441	-151	-138	-9	-9
FL TAMPA	TPA	0	-12	-31	379	-357	-248	-49	-40
FL WEST PALM BEACH	PBI	0	0	-17	143	-120	-160	-46	-53
GA ATLANTA	ATL	29	-46	-34	2546	-273	168	-10	7
GA AUGUSTA	AGS	27	-33	-38	2209	-231	119	-9	6
GA MACON	MCN	14	-35	-44	2076	-117	89	-5	4
GA SAVANNAH	SAV	12	-32	-43	1630	-237	57	-13	4
HI HILO-HAWAII	ITO	0	0	0	0	0	0	**	**
HI HONOLULU-OAHU	HNL	0	0	0	0	0	0	**	**
HI KAHULUI-MAUI	OGG	0	0	0	1	1	1	**	**
HI LIHUE-KAUAI	LIH	0	0	0	0	0	0	**	**
ID BOISE	BOI	177	24	88	4999	87	-749	2	-13
ID LEWISTON	LWS	145	1	46	4382	-246	-687	-5	-14
ID POCATELLO	PIH	205	14	89	5961	4	-479	0	-7
IL CHICAGO	ORD	115	-62	-3	5068	-569	-953	-10	-16
IL MOLINE	MLI	117	-60	12	5095	-699	-926	-12	-15
IL PEORIA	PIA	97	-69	-8	4862	-692	-767	-12	-14
IL QUINCY	UIN	98	-58	4	4585	-618	-710	-12	-13
IL ROCKFORD	RFD	112	-79	-12	5495	-627	-848	-10	-13
IL SPRINGFIELD	SPI	96	-55	2	4639	-441	-477	-9	-9
IN EVANSVILLE	EVV	76	-42	-20	4001	-310	-132	-7	-3
IN FORT WAYNE	FWA	111	-62	-25	5196	-342	-345	-6	-6
IN INDIANAPOLIS	IND	90	-60	-28	4689	-347	-254	-7	-5
IN SOUTH BEND	SBN	125	-53	-2	5282	-270	-356	-5	-6
IA DES MOINES	DSM	114	-66	25	5874	-982	-1282	-14	-19
IA DUBUQUE	DBQ	127	-75	2	5759	-730	-1296	-11	-18
IA SIOUX CITY	SUX	170	-19	71	5315	-914	-1125	-15	-17
IA WATERLOO	ALO	127	-78	7	5845	-829	-1226	-12	-17
KS CONCORDIA	CNK	163	11	111	4327	-710	-586	-14	-12
KS DODGE CITY	DDC	188	49	142	4191	-346	-227	-8	-5
KS GOODLAND	GLD	243	67	163	4712	-570	-374	-11	-7
KS TOPEKA	TOP	122	-16	72	4252	-572	-582	-12	-11
KS WICHITA	ICT	136	13	96	4080	-292	-141	-7	-3
KY BOWLING GREEN	BWG	66	-44	-23	3680	-271	54	-7	1
KY LEXINGTON	LEX	74	-51	-33	4057	-272	54	-6	1
KY LOUISVILLE	SDF	71	-45	-19	3821	-295	1	-7	0
LA ALEXANDRIA	AEX	27	-13	-14	1800	-101	184	-5	11
LA BATON ROUGE	BTR	4	-26	-46	1437	-194	55	-12	4
LA LAKE CHARLES	LCH	17	-11	-38	1458	-83	92	-5	7
LA NEW ORLEANS	MSY	2	-24	-51	1316	-140	46	-10	4
LA SHREVEPORT	SHV	46	1	1	2171	-2	303	0	16
ME CARIBOU	CAR	155	-103	-90	8301	229	229	3	3
ME PORTLAND	PWM	157	-51	-31	6256	-10	312	0	5
MD BALTIMORE	BWI	74	-56	-52	4137	-70	68	-2	2
MD SALISBURY	SBY	100	-26	-30	3940	17	274	0	7
MA BOSTON	BOS	132	-34	-5	4973	177	167	4	3
MA CHATHAM	CHH	161	-21	-3	4782	-54	244	-1	5
MI ALPENA	APN	152	-89	-31	6444	-572	-541	-8	-8
MI DETROIT	DTW	115	-70	-30	5261	-430	-477	-8	-8
MI FLINT	FNT	121	-84	-31	5614	-452	-553	-7	-9
MI GRAND RAPIDS	GRR	139	-59	-7	5593	-376	-517	-6	-8
MI HOUGHTON LAKE	HTL	153	-83	-28	6384	-634	-599	-9	-9
MI LANSING	LAN	134	-64	-15	5668	-356	-586	-6	-9
MI MARQUETTE	MQT	163	-105	-60	7412	-525	-829	-7	-10
MI MUSKEGON	MKG	138	-63	-23	5507	-384	-440	-7	-7
MI SAULT ST MARIE	SSM	167	-94	-58	6991	-713	-792	-9	-10
MN ALEXANDRIA	AXN	205	-48	10	6666	-1334	-1587	-17	-19
MN DULUTH	DLH	183	-83	-32	7472	-887	-1323	-11	-15
MN INT'L FALLS	INL	218	-60	-15	7911	-1185	-1373	-13	-15
MN MINNEAPOLIS	MSP	132	-86	-38	6921	-1050	-1531	-15	-20
MN ROCHESTER	RST	144	-85	-18	6441	-801	-1393	-11	-18
MN SAINT CLOUD	STC	170	-72	-29	6661	-1164	-1604	-15	-19
MS GREENWOOD	GWO	17	-43	-52	2310	-275	79	-11	4
MS JACKSON	JAN	17	-34	-50	2081	-204	-40	-9	-2
MS MERIDIAN	MEI	10	-43	-58	2105	-254	-68	-11	-3
MO CAPE GIRARDEAU	CGI	52	-62	-23	3631	-436	-78	-11	-2
MO COLUMBIA	COU	107	-31	42	4217	-488	-399	-10	-9
MO KANSAS CITY	MCI	110	-29	54	4280	-511	-683	-11	-14
MO SAINT LOUIS	STL	88	-40	21	4025	-466	-179	-10	-4
MO SPRINGFIELD	SGF	101	-22	38	3903	-312	-183	-7	-4
MT BILLINGS	BIL	249	46	153	5396	-696	-691	-11	-11
MT GLASGOW	GGW	267	24	146	6392	-1338	-1575	-17	-20
MT GREAT FALLS	GTF	275	54	158	5481	-1022	-1334	-16	-20
MT HAVRE	HVR	273	40	154	6257	-1177	-1195	-16	-16
MT HELENA	HLN	255	37	114	6555	-271	-827	-4	-11
MT KALISPELL	FCA	220	4	67	6703	-263	-689	-4	-9
MT MILES CITY	MLS	258	46	160	5820	-1031	-1031	-15	-15
MT MISSOULA	MSO	215	14	69	6478	-70	-513	-1	-7
NE GRAND ISLAND	GRI	215	35	141	4930	-859	-739	-15	-13
NE LINCOLN	LNK	168	-5	104	4782	-953	-860	-17	-15
NE NORFOLK	OFK	202	8	108	5232	-1020	-985	-16	-16
NE NORTH PLATTE	LBF	242	51	141	5175	-845	-923	-14	-15
NE OMAHA	OMA	155	-11	83	4876	-718	-1069	-13	-18
NE SCOTTSBLUFF	BFF	241	52	134	5490	-258	-689	-4	-10
NE VALENTINE	VTN	256	48	157	5663	-725	-942	-11	-14
NV ELY	ELY	243	34	122	6207	-24	351	0	6
NV LAS VEGAS	LAS	81	20	81	2174	-183	457	-8	27
NV RENO	RNO	173	10	84	4601	-351	142	-7	3
NV WINNEMUCCA	WMC	189	13	79	5406	120	194	2	4
NH CONCORD	CON	150	-56	-20	6432	41	211	1	3
NJ ATLANTIC CITY	ACY	113	-35	-34	4459	42	250	1	6
NM ALBUQUERQUE	ABQ	178	63	124	4179	193	731	5	21
NM CLOVIS	CVS	144	34	98	3621	-67	213	-2	6
NM ROSWELL	ROW	120	47	93	3225	272	559	9	21
NY ALBANY	ALB	186	-87	-48	6042	34	118	1	2
NY BINGHAMTON	BGM	97	-113	-70	5889	-358	-259	-6	-4
NY BUFFALO	BUF	114	-86	-45	5536	-257	-97	-4	-2
NY NEW YORK	LGA	74	-73	-48	4109	-205	-6	-5	0
NY ROCHESTER	ROC	126	-71	-18	5796	40	27	1	0
NY SYRACUSE	SYR	109	-88	-39	5849	23	101	0	2
NC ASHEVILLE	AVL	89	-23	-32	3696	-134	81	-3	2
NC CAPE HATTERAS	HAT	93	12	9	2240	-188	194	-8	9
NC CHARLOTTE	CLT	49	-35	-20	2953	-154	158	-5	6
NC GREENSBORO	GSO	70	-28	-31	3509	-40	220	-1	7
NC NEW BERN	EWN	63	-13	-17	2509	-162	298	-6	13
NC RALEIGH DURHAM	RDU	67	-22	-21	3211	-53	280	-2	10
NC WILMINGTON	ILM	53	-9	-17	2267	-77	327	-3	17
ND BISMARCK	BIS	240	-3	105	6925	-954	-976	-12	-12
ND FARGO	FAR	223	-30	52	6965	-1199	-1525	-15	-18
ND GRAND FORKS	GFK	231	-35	61	7507	-1064	-1465	-12	-16
ND WILLISTON	ISN	252	3	114	6933	-1071	-954	-13	-12
OH AKRON-CANTON	CAK	106	-68	-40	5119	-291	-171	-5	-3
OH CLEVELAND	CLE	121	-54	-18	5037	-300	-258	-6	-5
OH COLUMBUS	CMH	85	-65	-39	4551	-470	-195	-9	-4
OH CINCINNATI	CVG	84	-55	-27	4344	-346	-125	-7	-3
OH DAYTON	DAY	93	-61	-31	4717	-324	-203	-6	-4
OH TOLEDO	TOL	122	-60	-15	5283	-424	-309	-7	-6
OH YOUNGSTOWN	YNG	120	-63	-26	5338	-308	-65	-5	-1
OK OKLAHOMA CITY	OKC	115	18	90	3291	-183	78	-5	2
OK TULSA	TUL	100	5	78	3328	-161	116	-5	4
OR ASTORIA	AST	143	3	33	3635	-383	-416	-10	-10
OR BURNS	4BW	197	5	64	6030	321	-850	6	-12
OR MEDFORD	MFR	126	-4	48	3790	-183	80	-5	2
OR PENDLETON	PDT	153	15	53	4558	87	-770	2	-14
OR PORTLAND	PDX	130	3	47	3446	-373	-478	-10	-12
OR SALEM	SLE	149	13	56	3769	-197	-288	-5	-7
PA ALLENTOWN	ABE	95	-66	-54	5028	-74	94	-1	2
PA ERIE	ERI	138	-59	-4	5214	-469	17	-8	0
PA HARRISBURG	CXY	103	-44	-17	4765	31	162	1	4
PA PHILADELPHIA	PHL	72	-68	-57	4254	-148	79	-3	2
PA PITTSBURGH	PIT	95	-66	-45	4885	-325	-55	-6	-1
PA SCRANTON	AVP	97	-81	-48	5564	51	222	1	4
RI PROVIDENCE	PVD	133	-39	-15	5030	-27	176	-1	4
SC CHARLESTON	CHS	24	-25	-35	1833	-221	125	-11	7
SC COLUMBIA	CAE	37	-24	-40	2447	-51	162	-2	7
SC FLORENCE	FLO	34	-27	-22	2370	-61	425	-3	22
SC GREENVILLE	GSP	59	-21	-19	3044	29	248	1	9
SD ABERDEEN	ABR	223	-6	90	6387	-1129	-1575	-15	-20
SD HURON	HON	224	5	103	5918	-1207	-1714	-17	-22
SD RAPID CITY	RAP	256	49	162	5695	-516	-962	-8	-14
SD SIOUX FALLS	FSD	199	-13	68	5927	-1021	-1526	-15	-20
TN CHATTANOOGA	CHA	38	-49	-44	2906	-413	-1	-12	0
TN KNOXVILLE	TYS	64	-23	-40	3311	-71	-1	-2	0
TN MEMPHIS	MEM	30	-48	-21	2729	-299	57	-10	2
TN NASHVILLE	BNA	42	-52	-40	3238	-244	66	-7	2
TX ABILENE	ABI	102	45	94	2569	83	330	3	15
TX AMARILLO	AMA	166	54	131	3961	139	243	4	7
TX AUSTIN	AUS	30	-3	12	1535	-173	205	-10	15
TX BROWNSVILLE	BRO	0	-5	-5	626	19	147	3	31
TX CORPUS CHRISTI	CRP	8	-5	-3	982	22	198	2	25
TX DEL RIO	DRT	53	30	50	1490	2	289	0	24
TX EL PASO	ELP	95	35	57	2831	281	433	11	18
TX FORT WORTH	DFW	80	29	64	2300	89	187	4	9
TX GALVESTON	GLS	7	-17	-11	1130	-96	173	-8	18
TX HOUSTON	IAH	16	-10	-10	1422	-86	258	-6	22
TX LUBBOCK	LBB	137	46	120	3285	16	364	0	12
TX MIDLAND ODESSA	MAF	122	64	100	2781	252	461	10	20
TX BEAUMONT	BPT	13	-15	-21	1345	-102	208	-7	18
TX SAN ANGELO	SJT	97	50	89	2427	207	454	9	23
TX SAN ANTONIO	SAT	32	3	12	1512	-56	221	-4	17
TX VICTORIA	VCT	8	-13	-7	1198	-51	209	-4	21
TX WACO	ACT	62	18	46	2074	34	250	2	14
TX WICHITA FALLS	SPS	97	28	81	2826	-27	161	-1	6
UT BLANDING	4BL	223	54	129	5171	-53	490	-1	10
UT CEDAR CITY	CDC	228	60	134	5270	234	563	5	12
UT SALT LAKE CITY	SLC	183	28	102	4997	4	262	0	6
VT BURLINGTON	BTV	137	-85	-45	6722	-83	70	-1	1
VA LYNCHBURG	LYH	76	-37	-23	3937	24	251	1	7
VA NORFOLK	ORF	91	-5	-9	3080	-58	202	-2	7
VA RICHMOND	RIC	73	-30	-23	3683	52	357	1	11
VA ROANOKE	ROA	81	-31	-19	3896	2	242	0	7
WA COLVILLE	63S	165	-14	38	5309	-711	-894	-12	-14
WA QUILLAYUTE	UIL	140	-18	16	4125	-449	-486	-10	-11
WA SEATTLE-TACOMA	SEA	128	-13	25	3636	-456	-435	-11	-11
WA SPOKANE	GEG	181	2	44	5695	-150	-376	-3	-12
WA WALLA WALLA	ALW	140	17	47	4258	113	-784	3	-16
WA YAKIMA	YKM	152	2	21	5090	-50	-879	-1	-15
WV BECKLEY	BKW	101	-46	-28	4625	-246	116	-5	3
WV CHARLESTON	CRW	58	-61	-54	4018	-195	379	-5	10
WV HUNTINGTON	HTS	70	-47	-31	3998	-199	175	-5	5
WV PARKERSBURG	PKB	82	-49	-39	4328	-104	-8	-2	0
WI GREEN BAY	GRB	145	-81	-31	6246	-755	-1003	-11	-14
WI LACROSSE	LSE	112	-96	-23	5816	-861	-1327	-13	-19
WI MADISON	MSN	129	-79	-10	5919	-737	-1059	-11	-15
WI MILWAUKEE	MKE	135	-71	4	5466	-754	-798	-12	-13
WI WAUSAU	AUW	142	-94	-41	6506	-904	-1158	-12	-15
WY CASPER	CPR	296	79	184	6242	-108	-112	-2	-2
WY CHEYENNE	CYS	287	70	168	5851	-140	-8	-2	0
WY LANDER	LND	256	41	145	6715	87	-259	1	-4
WY SHERIDAN	SHR	264	49	158	5895	-665	-652	-10	-10

National Agricultural Summary

March 23 to 29, 1987

HIGHLIGHTS: Snowy, cold weather hit the Great Plains and Rocky mountains but caused little damage to winter wheat and small grains. Small grain growth slowed in these areas. The cold weather stressed livestock and caused losses in some areas. Rain impeded planting and land preparation in the southern Atlantic Coast States. Land preparation was in full swing in most eastern Corn Belt States. Soil moisture was adequate but approached surplus in the Southeast and Delta States. Fieldwork averaged 5 days west of the Rocky Mountain and Great Plains States. Farmers were able to work 3 days or less in the Southeast and Delta and 1 day or less in the Central and Northern Plains.

Corn planting continued lagging behind normal in the Southeast. Planting was underway as far North as Ohio but was restricted mostly to the Southeast. Soybeans and sorghum were planted in Texas. Cotton planting was underway in California. Wind and low soil temperature retarted growth and hampered planting in Arizona. Cotton planting progressed well in Texas. Rice planting trailed behind the 5-year average in Texas and Louisiana. Tobacco transplanting continued in Florida and Georgia. The cold weather damaged peaches in Arkansas, Texas, and Oklahoma.

SMALL GRAINS: Snow blanketed the Great Plains but caused little damage to winter wheat and small grains. Snow cover provided ample protection from cold temperatures in most areas. The cold weather slowed growth in most Plain States.

Kansas wheat was excellent to good, but record-low temperatures halted growth in western and central areas. Freeze damage may be possible depending on the stage of development. Most wheat had been topdressed and treated from weeds. Barley and oat seeding were 70 and 75 percent (%) complete, respectively.

In Oklahoma, wheat was mostly good and 35% of the acreage reached the jointing stage. Rain prevented fertilizer application and weed spraying, and many fields face nitrogen shortage. Small grains progressed well in Texas, but windy, snowy conditions slowed growth in the High Plains. Some producers applied fungicides and herbicides to control powdery mildew and weeds in the Blacklands and at Cross Timbers. Many fields were booting and some reached to heading stage. In central and southern Texas, most wheat was heading, but some producers were having problems with mildew.

Rain and warm weather promoted growth in the Southeast and Delta, but development lagged behind the average in most States. Jointing was 7 points behind normal, and only 11% reached the booting, less than half the normal pace. Heading was 8% finished in Louisiana, 9 points below the average. Small grain development was ahead of normal in Mississippi.

OTHER CROPS: Cold, wet, snowy weather virtually halted fieldwork from northern Texas through the Great Plains and across the Rocky Mountain States. Rain hampered fieldwork in the south Atlantic Coast States.

Corn planting was limited mostly to the Southeast, but a few acres were seeded in Ohio. Seeding lagged behind normal in all southeastern States except Alabama. Seeding was only 2 percentage points behind normal in Texas but was 43 points below the average in Louisiana. Twenty-seven percent of Georgia's corn acreage was seeded, compared with 52% in 1986 and the 51% average. In Mississippi seeding was progressing at a rate nearly two times slower than normal.

Cotton planting began in California and is expected to progress at a rapid pace. Wind and low soil temperature retarded growth and hampered seeding in Arizona. Planting moved into Mohave and Pinal Counties. In Texas, cotton planting progressed well in the Lower Valley, Coastal Bend, and along the Upper Coast. Planting neared completion in some Coastal Bend areas. Bad weather continued hampering cotton seedbed preparation in Oklahoma.

In Texas, rice seeding was 14% complete, 7 points below normal. Planting progress was good along the Upper Coast. Louisiana's rice was 12% seeded and 6% emerged. Seeding and emergence were slightly behind normal.

Sorghum seeding was still limited to Texas, which was 30% finished. Seeding normally would have moved into Okalhoma and spread across the Delta.

Tobacco transplanting advanced to 6% completion in Georgia but lagged 23 points behind normal. Tobacco plants were good to fair in North Carolina. In Virginia, flue cured tobacco plantbed seeding neared completion. Burley tobacco beds were 50% seeded. Tobacco bed seeding reached 75% completion in Tennessee, compared with the 58%. average.

FRUIT AND NUTS: Peaches and other fruit crops suffered damage from the cold weather in Texas, Arkansas, and Oklahoma. Georgia peaches were excellent to good. Most trees had reached the full bloom stage. South Carolina peaches were in full bloom; crop condition was good.

Florida's citrus were very good, and new growth was abundant. Blooming peaked with much petal droppage. Valencia orange harvest increased and early orange harvest was nearing end. In California, apples, grapes, and stone fruit bloomed. Apricots sized well, and avocado harvest continued. Almond set appeared excellent. Citrus was picked and packed. Limited citrus harvest continued at Yuma, Arizona. Freeze-damaged fruit slowed valencia orange packing in the Phoenix area.

VEGETABLES: Heavy rain curtailed field activities in Florida's vegetable producing areas. Spring vegetable harvest gained momentum. Volume leaders were tomatoes, cucumbers, celery, potatoes, cabbage, lettuce, and squash. Winter strawberry volume was near peak.

In the Rio Grande Valley, cabbage and carrot harvests were nearing their end. Cool morning and cloudy days slowed melon and cucumber growth. Planting and harvesting continued in San Antonio-Winter Garden area. Wet weather slowed land preparation in the High Plains. Artichokes, asparagus, broccoli, carrots, cauliflower, celery, and lettuce were harvested in California. Stawberries began blooming in the Davis Distict.

PASTURES AND LIVESTOCK: Snow and cold weather stress livestock in the northern and Central Plains and Rocky Mountain States. In Colorado, calving and lambing continued, but young animals were under stress. Ranchers were busy digging out and locating stray livestock in Kansas and North Dakota. The extent of losses were not known, but calves suffered the most. Heavy snowfall and cold gusty wind caused some cattle deaths in the Panhandle area of Oklahoma. The cold weather slowed pasture growth from Texas to North Dakota. Pastures continued responding to moisture and warm temperatures in most other areas.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Rainfall totals mostly 1.00 to 2.00 in.; mostly under 0.50 in. extreme northwest. Temperatures averaged 4 to 8° above normal.

Days suitable for fieldwork 4.2. Soil moisture 68% adequate, 32% surplus. Fieldwork progress behind schedule. Corn planted 45%, 32% 1986, 30% avg. Wheat headed 13%, 5% 1986; 42% fair, 56% good, 2% excellent. Pastures, livestock good to fair. Pasture feed supply adequate to short. Primary activities: Planting corn, potatoes, other vegetables; land preparation; soil testing; stocking fishponds; spraying fruit tress; applying fertilizer, lime to cropland, pastures; routine care of livestock, poultry.

ARIZONA: Skies cleared 22nd as weekend storm moved into New Mexico. Minimum temperatures 23rd, 4 to 10° high country, 20s at 5,000 ft., 30s to lower 40s southern deserts. Increased cloudiness afternoon, night. Scattered showers, isolated thunderstorms 24th, 25th. Snowfall amounts 1 to 6 in. above 6,000 ft., rainfall lower elevations traces to 0.10 in. Skies cleared statewide late 25th. Mostly sunny conditions prevailed 26th, 27th. Strong dry cold front 27th produced gusty winds to 40 mph. Minimum temperatures early 28th, 5 to 15° lower than 27th. Average temperatures for 2 to 10° below normal.

Cotton planting underway Mohave, Pinal Counties; continued Yuma, La Paz, Maricopa Counties. Most cotton growers waiting for warmer soil temperatures. Wind, low soil temperatures retarded stand establishment. Listing, pre-irrigation active. Hay harvest continued large scale west, moderate central; curing conditions favorable, except during strong wind. Crop reported good. Corn planting complete west, 50% emerged. Crop good. Most corn up to stand central. Wheat, barley stands fair to good; 93% jointing, 92% 1986; 35% heading, 50% 1986. Irrigation, fertilization continued as needed. Lettuce packing advanced Harquahala Valley, Parker-Poston, Marana-Eloy District. Movement just beginning Casa Grande. Lettuce harvest continued Yuma, completion of deal expected mid-April. Other vegetables shipped included asparagus, artichokes from Parker-Poston; romaine, leaf, boston lettuce, cabbage, endive, asparagus from Yuma; broccoli winding down. Spring melon planting complete Yuma, stand establishment generally good. Citrus fruit harvest continued limited scale Yuma. Groves good. Valencia orange packing fairly slow Phoenix area due to some freeze-damaged fruit. Soil moisture from March rainfall left range, pasture conditions ideal. Warmer temperatures needed to accelerate feed growth. Cattle, calves good north, fair to excellent central, fair to good south.

ARKANSAS: Weak cold front moved through early in week bringing cooler air to western two-thirds of State. Second, much stronger, cold front 29th brought extremely cold air to entire state. Both fronts accompanied by rain, showers. Second front brought snow. Temperature extremes 29°; 81°. Rainfall 0.45 to 1.88 in.

Fieldwork limited to higher ground. Dry weather needed to not fall behind. Cold weather caused damage to peaches, blueberries with further damage expected. Cattle good. Cold killed young grasses, legumes.

CALIFORNIA: Early part of week brought well below normal temperatures, scattered rain and snow showers. Temperatures above normal by end of week.

Rain beneficial small grains most areas. Seeding late grains progressed. Early fields heading out. Spraying weeds neared completion. Small grains, forage mixes, alfalfa green-chopping, progressed. Some safflower seeded. Early fields germinated, good progress. Cotton planting began, expect rapid progress. Alfalfa treated weeds, weevils. Quality hay cut, baled desert areas. Apples, grapes, stone fruits bloomed. Apricots sized well. Avocado harvest continued. Isolated hail damage reported. Almond set appeared excellent. Walnuts neared bloom. Citrus picked, packed. Bloom for 1987-88 crop appeared normal. Artichokes moderate, improved quality, Salinas. Asparagus harvest started, Sacramento Valley, continued Delta, Firebaugh District; good demand, quality. Strawberry plants blooming, Clovis District. Picking continued, Oxnard, Los Angeles-Orange County. Broccoli heavy, Salinas; fairly light, Santa Maria; good quality. Packing continued Fresno, Oxnard, Patterson-Newman. Carrot digging active, good quality, desert, south coast, Perris-Hemet, Kern-Tulare. Cauliflower moderate, Salinas; very light, Santa Maria, good quality. Harvest active, Patterson-Newman. Celery harvest active Oxnard, Los Angeles-Orange County; good quality. Lettuce packing, Palo Verde Valley, continued, good quality; harvesting started San Joaquin Valley very light volume; variable weight, quality. Harvest, Huron District, picked up; fair quality, excellent prices. Firebaugh District harvest will not start for several weeks. Fall potato packing, Tulelake-Butte Valley operating steadily. Fieldwork, 1987 crop not started yet. Winter potato digging active, Kern, Riverside Counties. Spring potato planting progressed, Kern. Planting tomatoes for processing, fresh market continued active statewide. Fresh pack plants transplanted, Fresno. Cannery tomato fields germinating well, Blythe. Rain, warm weather continued benefit ranges, pastures. Livestock gains improving with increased grass growth. Supplemental feeding declined. Movement bees fruit orchards pollination continued. Stock ponds remained low levels.

COLORADO: Temperatures 4 to 7° below normal. Precipitation widespread. Amounts to 0.55 in.; blizzard conditions east.

Days suitable for fieldwork 2.0. Livestock, winter wheat good. Calving, lambing continued. Young animals under stress from cold.

FLORIDA: Pleasant springtime weather early week gave way to widespread heavy thunderstorms 26th, more intense remainder of week. Rains of 1.00 to 2.00 in. each day common; some locations totals exceeded 5.00 in., especially through central Peninsula.

Soil moisture generally adequate, heavier soils remained too wet for cultivation. Corn planting continued where possible. Early corn up to good stands. Wheat beginning to head; Hessian fly damage present. Tobacco transplanting active. Sugarcane harvest winding down. Southern Peninsula pastures good to excellent; elsewhere, mostly fair to good. Cattle fair to good. Citrus groves very good. Heavy late week rains, thunderstorms many areas. Abundant new growth. Peak bloom period, with much petal drop. Valencia harvest increased; early orange harvest virtually complete.

Caretakers active all areas. Temperatures seasonal vegetable producing areas. Heavy late week rains curtailed field activities northern, central areas. Spring crop harvest becoming active. Volume leaders: Tomatoes, cucumbers, celery, potatoes, cabbage, lettuce, squash. Good supplies snap beans, carrots, sweet corn, escarole, radishes. Winter strawberry volume near peak.

GEORGIA: Daily weather changes. Rain 3 to 5 days, 1.00 to 3.00 in. Temperatures 5 to 8° above normal except 2 to 4° above normal northeast mountains. Coldest from mid, upper 30s higher northeast mountains to mostly 50s central, south. Warmest from mid, upper 70s north to low, mid 80s extreme south.

Days suitable for fieldwork 2.8. Soil moisture 41% adequate, 59% surplus. Limited fieldwork due to rain. Corn 2% poor, 35% fair, 61% good, 2% excellent; 27% planted, 52% 1986, 51% avg. Tobacco 1% poor, 46% fair, 53% good; 6% transplanted, 23% 1986, 29% avg. Watermelons fair to good; 31% planted, 47% 1986, 51% avg. Wheat 4% poor, 30% fair, 63% good, 3% excellent; 63% jointing, 71% 1986, 70% avg.; 11% boot, 22% 1986, 24% avg. Rye good to fair. Other small grains good to fair. Apples mostly good; 3% blooming, 25% 1986, 25% avg. Peaches 1% poor, 1% fair, 45% good, 53% excellent; 93% blooming, 86% 1986, 89% avg. Pastures mostly good to fair. Cattle mostly good to fair. Hogs mostly good. Main activities: Fertilization, planting, spraying fruit trees as weather permitted.

HAWAII: Beneficial mixture sunshine, showers. Occasional heavy showers caused flooding. No major damage to agriculture. Daytime temperatures near record high levels early week, cooler temperatures prevailed late week. Overall crop condition improved; fair to good. Variable winds 5 to 25 mph. Temperatures ranged low 60s to mid 80s. Rainfall ranged none to 2.10 in.

Days suitable for fieldwork 7.0. Banana production steady. Papaya production seasonally low. Chinese cabbage harvesting remained active, some shipments to mainland. Light to moderate production for other vegetables.

IDAHO: Colder spring weather most week.

Days suitable for fieldwork 5.0. Spring wheat 11% seeded, 15% 1986, 10% avg. Spring barley 8% seeded, 10% 1986, 6% avg. Sugarbeet 16% planted, 16% 1986, 8% avg. Onions 24% planted, 37% 1986, 24% avg. Potato planting not yet underway. Winter wheat good. Calving 63% complete; lambing 63% complete.

ILLINOIS: Temperatures averaged 2 to 6° above normal. Warm early week, cold late week. Precipitation widespread, 1.00 to 1.75 in. northwest and west central; elsewhere mostly 0.25 to 0.75 in.

Winter wheat mostly good to fair. Livestock mostly good.

INDIANA: Temperatures 5 to 8° above normal. Lows from mid 30s to low 40s. Highs 50s to mid 60s. Soil temperatures upper 40s to low 50s. Precipitation total 0.25 in. northwest to 1.00 south.

Fieldwork full swing. Activities: Tilling, seeding diverted acres, spreading fertilizer, lime, manure, hauling grain, machinery repair, care of livestock. Soils dry. Wheat greening-up.

IOWA: Temperatures 1 to 2° subnormal west, 3 to 5° above normal elsewhere. Extremes 74° Burlington 23rd to 8° Mason City 30th. Precipitation early, late week; substantial snow northwest two-thirds closed many highways, amounts 14 to 15 in. Harrison County, 10 to 12 in. Carroll.

Days suitable for fieldwork 1.3. Topsoil moisture 2% short, 70% adequate, 28% surplus; subsoil moisture 3% short, 82% adequate, 15% surplus. Winter wheat 2% very poor, 4% poor, 22% fair, 52% good, 20% excellent. Fieldwork slowed by wet soil; oats 6% sown, 6% 1986, 7% avg. Fertilizer application 21% completed. Livestock good; calving, lambing few problems. Pastures began to green. Other farm activities: Hauling manure, readying equipment, usual chores.

KANSAS: Temperature 29° west, mid 40s east. Departures from normal 10 to 15° below west, normal east. Blizzard 7 to 11 in. snow west pushed snow drifts 4 to 7 ft. deep. Rainfall 1.00 in. or less northwest, southeast, northeast. Central, southwest 2.00 to 4.00 in.

Days suitable for fieldwork 0.5. Soil moisture 26% adequate, 74% surplus. Wheat 1% very poor, 3% poor, 7% fair, 32% good, 57% excellent. Record low temperatures end of week haltED growth western, central areas. Some freeze damage possible depending stage of development. Light insect, disease problems, most fields topdressed fertilizer, treated for weed control. Seeding oats, barley 75%, 70% complete respectively. Wet fields delay seedbed preparation for spring planted crop. Ranchers digging out, locating strayed livestock, counting losses following back-to-back snow storms. Extent of losses not known yet but calves suffered most. Feed grain, forage good supply but problem getting feed to livestock.

KENTUCKY: Condition mild. Temperature averaged 5 to 10° above normal. Low temperature 40s. Highs mid 60s to low 70s. Soil temperature depth 4 in., averaged 50s. Rainfall averaged 0.10 to 0.75 in.

Days suitable for fieldwork 4.7. Soil moisture 4% very short, 54% short, 39% adequate, 3% surplus. Plowing 45% complete, 33% 1986. Some corn planted west, south. Tobacco beds 75% seeded, 55% 1986, 58% avg. Small grains, legumes little winter damage. Much wheat fertilized. Pastures same as 1986 supplying 25% cattle roughage. Hay supplies adequate. Livestock good.

LOUISIANA: Temperature 1 below to 4° above normal. Temperature extremes 36°; 84°. Rainfall averaged 0.76 to 2.53 in.

Days suitable for fieldwork 2.4. Soil moisture 41% adequate, 59% surplus. Spring plowing 17% complete, 66% 1986, 48% avg. Corn planted 8%, 64% 1986, 51% avg.; emerged 2%, 45% 1986 23% avg. Rice planted 12%, 19% 1986, 15% avg.; emerged 6%, 9% 1986, 7% avg. Winter wheat fair to good; 8% headed, 27% 1986, 17% avg. Vegetables fair. Sugarcane, pastures, livestock fair to good. Main activities: Spring plowing; planting corn, rice, home gardens; fertilizing pastures; caring for livestock.

MARYLAND & DELAWARE: Maryland: Average temperature 50°, normal 46°. Lowest temperature 24°; highest temperature 74°. Precipitation averaged 0.06 in.

Main farm activity caring for livestock.

Delaware: Average temperature 49°, normal 46°. Trace precipitation.

Main farm activity caring for livestock.

MICHIGAN: Temperatures ranged 8 to 15° above normal. Temperature extremes 22°; 72°. Precipitation ranged from 0.01 to 0.63 in. across State. Northern Lower Peninsula, Upper Peninsula heavy weekend snow.

No snow cover southern Lower Peninsula. Winter wheat greening. Activities: Sowing oats, plowing well drained fields, spreading fertilizer, attending farm auctions, topdressing wheat, pruning fruit trees, completing tax forms, buying spring

supplies, marketing grain, livestock, fruits, vegetables. Maple syrup season ending. Livestock excellent. Feed supplies adequate.

MINNESOTA: Temperatures averaged near normal to 11° above normal. Temperature extremes 3°; 68°. Precipitation averaged 0.29 in. below normal east central; 1.51 in. above normal southwest; near normal to 0.51 in. above normal elsewhere. Snowfall averaged 6 in. southeast; trace elsewhere. Snow depth weekend averaged 6 in. southeast. Greatest precipitation 2.98 in. Worthington, 2.55 in. above normal.

Spring planting delayed by cold temperatures weekend.

MISSISSIPPI: Temperatures up to 8° above normal; extremes 35°; 86°. Fair warm weather for State with average weekly rainfall 0.80 in. Greatest weekly rainfall 2.18 in.; greatest 24-hour total rainfall 1.82 in.

Days suitable for fieldwork 3.0, 6.0, 1986, 3.5 avg. Soil moisture 51% adequate, 40% surplus, 9% excessive. Corn 14% planted, 34% 1986, 26% avg. Wheat 67% jointing, 80% 1986, 59% avg.; 3% poor, 48% fair, 36% good, 13% excellent. Watermelons 15% planted, 20% 1986, 19% avg.

MISSOURI: Temperatures averaged 4° above normal; much colder by weekend. Rainfall averaged over 1.25 in. southwest to northeast; northwest, southeast averaged 0.50 in.

Wet weather limited fieldwork most areas.

MONTANA: Temperatures near normal west, 3 to 7° below east. Precipitation statewide; averaged 0.70 in.

Soil moisture improved. Snow cover most areas. Winter wheat mostly good. Storms stressed livestock.

NEBRASKA: Precipitation less than 0.10 in. over Panhandle. Two inches precipitation common over central, southeast. Temperatures 5 to 10° below normal. Blizzard conditions hit most of State during week. Temperature extremes 5°; 57°.

Winter storm conditions providing stress to cattle, calves; losses expected.

NEVADA: Storm early in period dropped 1 in. snow north, 8 in. snow south central, 0.31 in. rain extreme south. Cold, clearing skies midweek. Temperatures returned to normal by end of period. Temperatures averaged 5° below normal all areas. Extremes 11°; 71°.

Better progress fieldwork last half of week. Snow, gusty winds not favorable newborn calves, lambs.

NEW ENGLAND: Dry week. Average precipitation 0.05 to 0.25 in. western and central Maine, southern New Hampshire, Vermont, Massachusetts, 0.25 to 0.50 in. coastal Maine, northern New Hampshire, Rhode Island, Connecticut. Temperatures averaged 8 to 14° above normal north, 7 to 10° above normal south.

Major farm activities: Machinery repair, tending livestock, moving crops from storage, maple sugaring, poor runs to date.

NEW JERSEY: Temperatures averaged much above normal. Extremes 25°; 73°. Rainfall averaged 0.28 in. north, 0.48 in. central, 0.54 in. south. Heaviest 24-hour total 1.24 in. on 27th, 28th. Estimated soil moisture percent field capacity averaged 95% north, 94% central, 93% south. Four inch soil temperatures averaged 47° north, 49° central, 50° south.

Preparation, planting active. Few leftover fields of corn for grain harvested. Pastures greening, fruit bud swelling continued. Fence mending, machinery repair, other spring activities active.

NEW MEXICO: Temperatures averaged 6 to 14° below normal statewide. Extremely cold air mass moved into State on weekend setting record low temperatures. Snowfall statewide; precipitation few hundredths of an inch lower elevations to near 0.50 in. mountains.

Days suitable for fieldwork 5.2. Soil moisture 89% adequate, 11% surplus. Alfalfa fair to good; growth slowed due to low temperatures. Barley 13% fair, 74% good, 13% excellent. Irrigated wheat 14% fair, 57% good, 29% excellent. Dryland wheat 20% fair, 60% good, 20% excellent, Russian wheat aphid building up several locations. Chile, lettuce, onions all good. Cattle, sheep fair to good. Ranges poor to good.

NEW YORK: Temperatures averaged 10° or more above normal across most of State. Eastern areas dry weather, rainfall well below normal. Showers midweek left 0.33 to 0.75 in. western Adirondacks to Great Lakes sections.

Most fields clear of snow, producers began starting spring fieldwork.

NORTH CAROLINA: Temperature 2° above normal mountain region, 4° above normal Piedmont region, 2° below normal coastal Plain region. Temperature extremes 26°; 79°. Precipitation ranged from 0.04 to 2.13 in. across State.

Days suitable for fieldwork 4.8. Soil moisture 1% short, 90% adequate, 9% surplus. Small grains mostly good. Irish potatoes 76% planted, 86% 1986, 71% avg.; 27% fair, 73% good. Pastures fair to good. Tobacco plantbeds 33% fair, 67% good. Hay, roughage supplies mostly adequate to short. Feed grain supplies mostly adequate to short. Major farm activities: Topdressing small grains, pastures; preparing land; seeding, preparing tobacco plantbeds; tending livestock; maintaining equipment; planting spring Irish potatoes, cabbage; pruning, spraying fruit trees; transplanting Christmas trees; spreading lime; mowing; general farm maintenance.

NORTH DAKOTA: Temperatures slightly below normal southwest to slightly above northeast. Extremes 3°; 52°. Precipitation above normal, generally 0.50 in. or less, 0.95 in. southeast. Heavy snow some areas.

Snow remained in shelter belts, hilly areas. Soil very moist statewide. Fieldwork 2 to 3 weeks away. Livestock good, calves suffered most in recent cool, damp weather. Lots, pastures muddy.

OHIO: Temperatures 8 to 12° above normal, 60° north to 70° south. Low 25° Jackson on 24th. More than 0.25 in. rainfall most sections. Over 1.00 in. band across north, parts of southwest. Soil temperatures 40° north to 50° south.

Plowing virtually compete except northeast; most fields final stage of disking. Over 75% oats drilled, very little corn planted. Some sugarbeets sown, planting potatoes very limited, setting cabbage plants southeastern counties nearly complete. Seeding vegetables, muck land area full swing; mostly dry onions, kale, lettuce; transplanting celery, lettuce beginning. Apple buds progressed to tip green stage, peaches and apricots in bloom in central and southern areas. Wheat broke dormancy northern counties, little growth due to lack of moisture. Weekend rain improved wheat. Pastures received needed moisture.

OKLAHOMA: Temperatures averaged 14° below normal Panhandle to 5° below normal southeast. Precipitation averaged 0.03 in. Panhandle to 1.11 in. northeast.

Topsoil moisture 30% adequate, 70% surplus. Subsoil moisture 100% adequate. Wheat 15% fair,

84% good, 1% excellent; 35% jointing, 45% 1986, 30% avg. Cold weather limited growth. Many fields face nitrogen shortage. Rains prevent fertilizer applications, weed spraying. Sorghum 5% seedbed prepared, 50% 1986, 30% avg. Cotton 10% seedbed prepared, 40% 1986, 25% avg. Wet fields limited row crop activity. Spring fruits suffered undetermined freeze damage. Pastures 5% poor, 25% fair, 65% good, 5% excellent. Cattle 20% fair, 80% good. Heavy snowfall, cold gusty winds caused some cattle deaths Panhandle. Marketings near normal, prices up from preceding week.

OREGON: Temperatures averaged 2 to 3° below normal, except extreme south coast averaged 5° above normal. Precipitation ranged from 0.50 to 1.00 in. along coast; 0.25 to 0.50 in. western interior, Cascades. East of mountains, precipitation averaged around 0.10 in. south central, extreme northeast; elsewhere only trace amounts.

Soil moisture mostly adequate east, adequate to surplus west. Winter grains, grass seeds greened-up, look very good. Spraying, fertilizing spring tillage, some seeding continued. Fruit tree development ahead of normal. Livestock, range, pasture good. Early forage began to develop most locales.

PENNSYLVANIA: Mild, dry. Average temperature 49°, 9° above normal. Temperature extremes 20°; 74°. Average precipitation 0.38 in., 0.43 in. below normal.

Activities: Hauling manure; machinery maintenance; caring for livestock; early spring activities.

PUERTO RICO: Island average rainfall 0.46 in., 0.19 in. below normal. Highest weekly total 3.66 in. Highest 24-hour total 3.66 in. Temperatures averaged about 78 to 79° on coasts, 74° interior divisions. Mean station temperature ranged from 63 to 80°. Extremes 52°; 93°. San Juan mean temperature 81°, 2° below normal. Total rainfall 0.01 in., 0.55 below normal.

SOUTH CAROLINA: Temperatures seasonal. Rains heavy, coastal, foothills.

Days suitable for fieldwork 2.3. Soil moisture 58% adequate, 42% surplus. Corn fair to good; 7% planted, 16% 1986. Tobacco, cotton activity slowed by rains. Watermelons 22% planted, 33% 1986. Cantaloupes fair; 7% planted, 12% 1986. Tomatoes good; 63% planted, 24% 1986. Peaches good, in full bloom. Planting, other activities delayed, excessive rain.

SOUTH DAKOTA: Average temperatures 13° below west to 3° above normal southeast. Extremes -8°; 65°. Precipitation above normal; southeast 3.97 in. rain; central 15 in. snow. Year to date precipitation above normal. Soil temperatures average 22° to 32°.

Grasses began to green. Livestock good. Main agricultural activities, tending livestock, planning spring planting.

TENNESSEE: Temperatures averaged 5 to 8° above normal. Daily average temperatures upper 50s to near 60. Extremes lower 80s, upper 30s. Patchy light rain most State, amounts well below normal. Amounts totaled below 1.00 in. except extreme southeast 1.50 in. rainfall. Heavier widespread rain on 29th.

Tillage progressed where dry soils permitted. Winter wheat, pastures good growth.

TEXAS: Upper level low pressure trough central U.S. dominated last weeks weather. Numerous weather disturbances north, east early week; system produced enough cold air for snow Panhandle. Isolated to widely scattered showers developed portions Panhandle, north. Most weather systems north. One disturbance produced showers along coast. Weekend vigorous, late winter Arctic cold front pushed into State bringing cloudiness, much cooler air. Precipitation light, above normal rainfall only Plains, Trans-Pecos. Elsewhere, totals below normal. Temperatures entire State below normal.

Crops: Small grains good progress. High Plains windy, snowy conditions slowed growth. Additional moisture helpful. Growth, progress good Cross-Timbers, Blacklands. Some producers applied fungicides to control powdery mildew, herbicides to control weeds. Many fields booting, some fields heading. Central, south growth good, most fields heading. Some mildew. Prospects remained good. Fields for grazing provide good forage. Wheat 2% headed, 10% 1986, 2% avg. Corn, grain sorghum planting good progress Blacklands, central; some producers winding down corn planting. Drier weather accelerated planting portions Blacklands. Planting active east, along Upper Coast. Planting winding down Coastal Bend, Rio Grande Valley, open weather allowed producers to stay busy. Cooler morning temperatures did not slow germination, good stands developing. Plains land preparation ahead of schedule despite snow past week. Corn 45% planted, 63% 1986, 47% avg. Sorghum 30% planted, 53% 1986, 46% avg. Cotton planting good progress Lower Valley, Coastal Bend, Upper Coast. Planting winding down some areas Coastal Bend. Cotton 8% planted, 8% 1986, 7% avg. Rice planting good progress Upper Coast, some soybeans also planted. Rice 14% planted, 41% 1986, 21% avg. Other field crops: Sugarbeets none planted, 5% 1986, 14% avg.

Commercial Vegetables: Rio Grande Valley onion harvest well underway, good market demand. Cabbage, carrot harvest winding down. Melons, cucumbers slowed by cloudy days, cooler mornings. Some melon fields blooming, planting continued. San Antonio-Winter Garden harvest continued spinach, cabbage, carrots, greens. Watermelons, onions good development. Trans-Pecos irrigation started onion sets. Cantaloup planting continued. East watermelon planting continued. Bedding sweetpotatoes increased. High Plains transplanting onions slowed by bad weather. Land preparations slowed. Peaches suffered most from recent cold weather. Lower temperatures forecasted for next week. Some blooms killed Plains. Many areas in full bloom, spraying continued. Producers east reported good set before freezing weather. Pecan trees began bud breaking east, south.

Range and Pasture: Ranges, native pastures continued green-up. Forage availability increased, supplemental feeding decreased. Weeds caused problems in improved pastures. Some fertilization last week. Small grain pastures good grazing. Livestock suffered from heavy snow High Plains. Scattered losses occurred. Weight gains small grains good. Hill Country shearing sheep continued. Lamb shipments continued, better prices.

UTAH: Precipitation light to moderate. Temperatures 5 to 9° below normal.

Livestock feed adequate to surplus. Livestock generally good to excellent. Major farm activities: Hauling manure, calving, lambing, shearing, ditch maintenance, repairing equipment.

VIRGINIA: Fair, dry beginning. Fair, light rain mid period. Heavier rain on 30th. Temperatures just below normal east, just above normal west; range 24 to 78°. Precipitation well below normal until 30th.

Days suitable for fieldwork 4.8. Topsoil moisture 11% short, 86% adequate, 3% surplus. Spring liming, fertilizing, plowing. Small grain weed control. Seeded oats, pastures, hayland, potatoes. Flue-cured tobacco plantbed seeding nearly complete. Burley tobacco 50% seeded.

Irrigated some tobacco plantbeds early period. Pastures, alfalfa, barley, wheat, fruit, tobacco good to excellent. Pruned fruit trees, some spraying. Marketed some livestock. Sheared sheep. Feed tight, some feed purchasing. Recent mild weather aided livestock. Other activities: Soil sampling, fencing, ASCS sign-up.

WASHINGTON: High pressure system caused clear skies, warm days, cool nights. Temperature extremes 22º; 65º. Precipitation below normal.

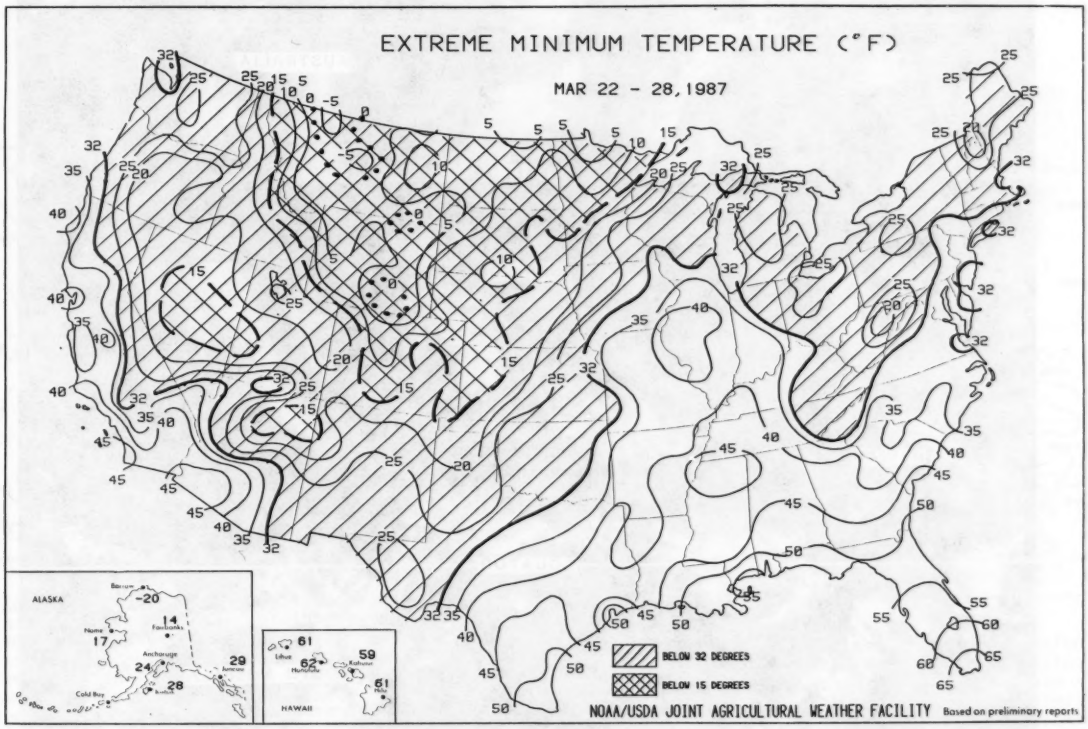
Soil moisture 10% short, 70% adequate, 20% surplus. Warm, sunny conditions dried fields for spring work. Plowing, seedbed preparation, planting activities increased. Crops mostly good. Range, pastures 40% short, 60% adequate. Hay, roughage 75% adequate, 25% surplus. Lambing continued. Calving winding down. Orchards threatened by frosts; no substantial damage. Pruning nearly complete.

WEST VIRGINIA: Average temperature 53º, 6 to 9º above normal. Extremes 19º Greenbank; 82º Creston. Precipitation averaged 0.39 in.; below normal statewide.

Soil moisture 25% very short, 50% short, 25% adequate. Feed supplies mostly adequate.

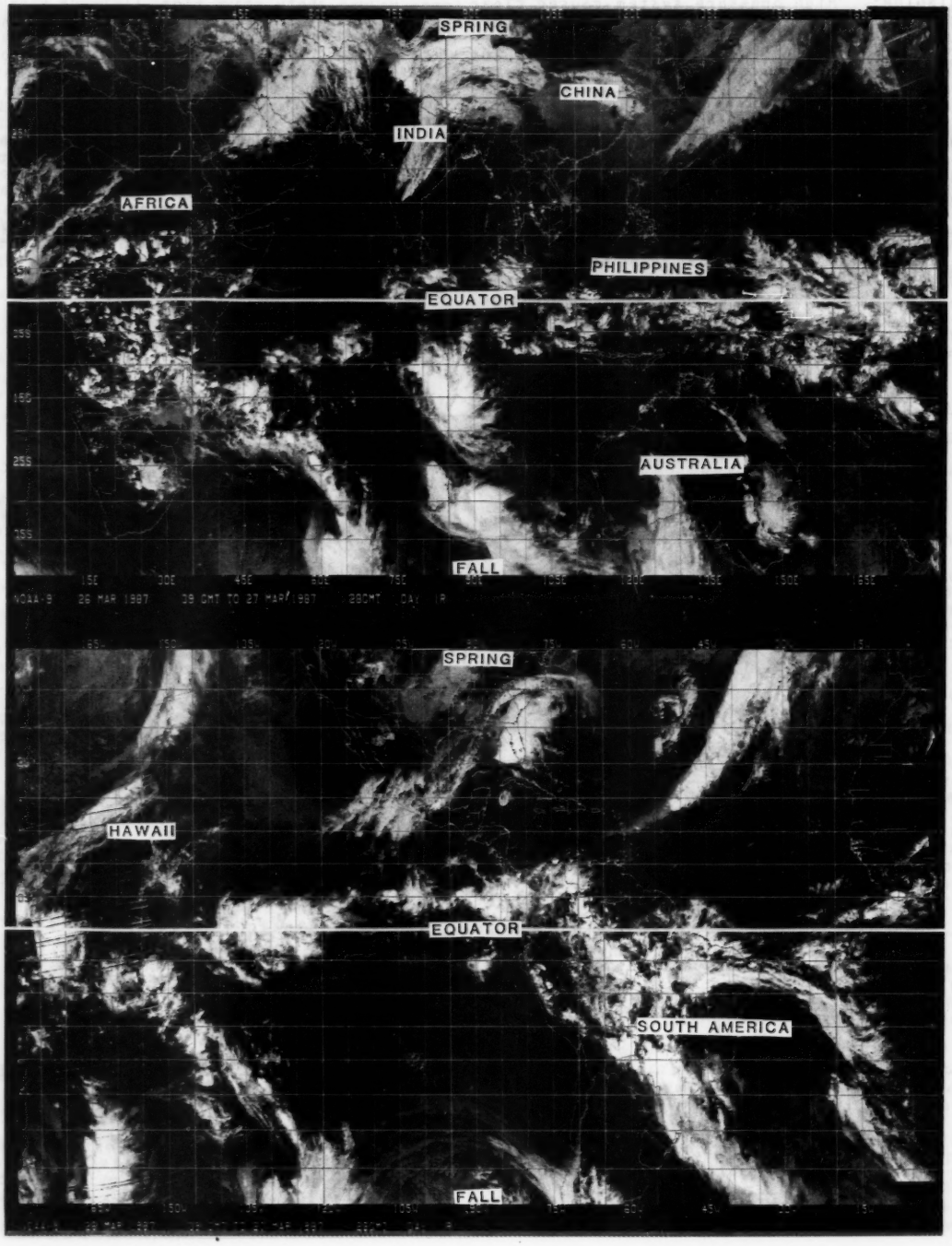
WISCONSIN: Temperatures near normal, low 14º; high 72º. Precipitation 0.20 to 1.20 in. Snowfall 4 to 8 in. southwest, central, northeast on 29th. Frost depth averaged 1.50 in. Soils moist, little run off; somewhat dry central, east central.

WYOMING: Temperatures below normal. Precipitation below normal except Belle Fourche Drainage. Days suitable for fieldwork 1.0. Topsoil moisture 8% short, 70% adequate, 22% surplus. Subsoil moisture 71% adequate, 29% surplus. Spring wheat none planted, 5% 1986, 5% avg. Oats none planted, 10% 1986, 5% avg. Barley 5% planted, 25% 1986, 20% avg. Sugarbeets none planted, small amount 1986. Winter wheat mostly good. Light to moderate wind, freeze damage. Livestock mostly good. Spring calves born 35%, 40% 1986, 50% avg. Death losses light to normal. Farm flock: Ewes lambed 40%, 50% 1986, 45% avg.; shorn 45%, 45% 1986, 45% avg. Range flock: Ewes lambed 15%, 15% 1986, 20% avg.; shorn 15%, 15% 1986, 20% avg. Death losses light to normal. Range, pastures fair to good.



Global Weather Satellite Image

MARCH 26-27, 1987



International Weather and Crop Summary

March 22-28, 1987

HIGHLIGHTS:

UNITED STATES ... Snow and cold weather cause little damage to winter wheat and small grains in the Great Plains and Rocky Mountain States. The cold weather stresses livestock and causes losses in some areas.

WESTERN U.S.S.R. ... Moderating temperatures slowly melt snow in the west and south.

EUROPE ... Mild weather and rain promote greening of winter wheat in many areas except the northeast where the crop remains dormant. Persistent dryness in southern Spain stresses winter grains, entering the heading stage.

SOUTH ASIA ... Rainfall continues in northern Pakistan and northern India, improving moisture reserves for grain-filling wheat. Light rain in central India may interrupt harvesting.

SOUTHEAST ASIA ... Showers improve moisture conditions in northeast Thailand. Mostly light rain covers the Philippines.

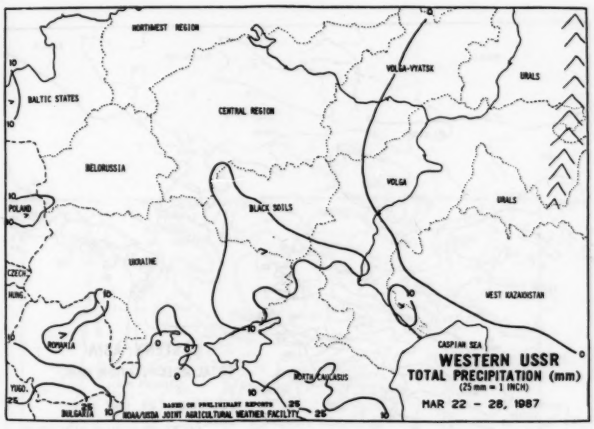
EASTERN ASIA ... Dry weather covers vegetative wheat in the North China Plain. Moderate to heavy rain continues over early double-crop rice areas.

SOUTH AMERICA ... Rain interferes with summer crop harvesting in Argentina and south-central Brazil.

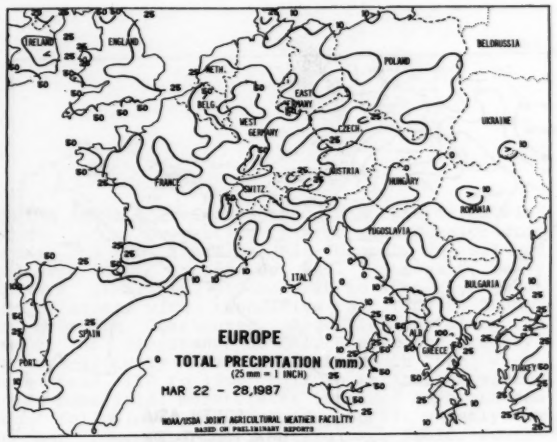
AUSTRALIA ... Showers continue in most summer crop and sugarcane areas of eastern Australia, but pockets of warm, dry weather persist over unirrigated summer crop areas in southeast Queensland.

SOUTH AFRICA ... Moderate to heavy rainfall benefits grain-filling corn but slows harvesting of early planted corn.

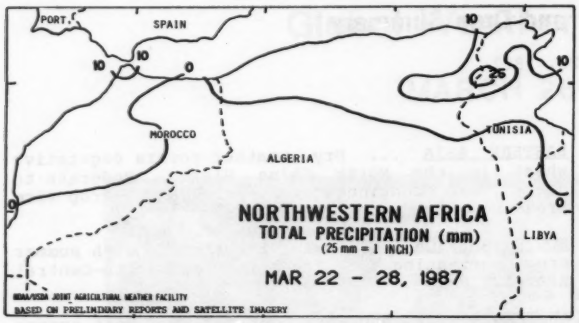
NORTHWESTERN AFRICA ... Persistent dryness stresses Moroccan winter grains in the heading stage.



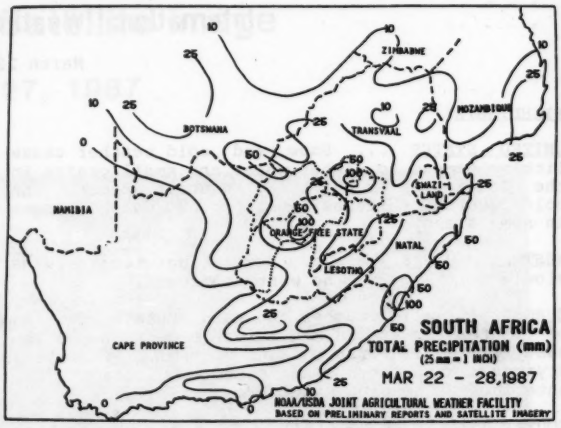
WESTERN U.S.S.R. ... Light precipitation, mainly snow, covered winter grains over much of the region. Greatest snowfall covered the eastern Ukraine and the southern Black Soils region. Temperatures continued to moderate with day maximum temperatures rising to above freezing over much of the region, resulting in some loss of snow cover. A deep snow cover likely remains in the northern and eastern Ukraine, Black Soils, northern North Caucasus, Volga Valley, Central Region, Volga Vyatsk, and the Urals. Crop areas in the Baltic States, Belorussia, the southern Ukraine, and southwestern North Caucasus are without a significant snow cover. Winter grains remained dormant over the region. Usually, winter grains in the Ukraine and North Caucasus break dormancy in early April.



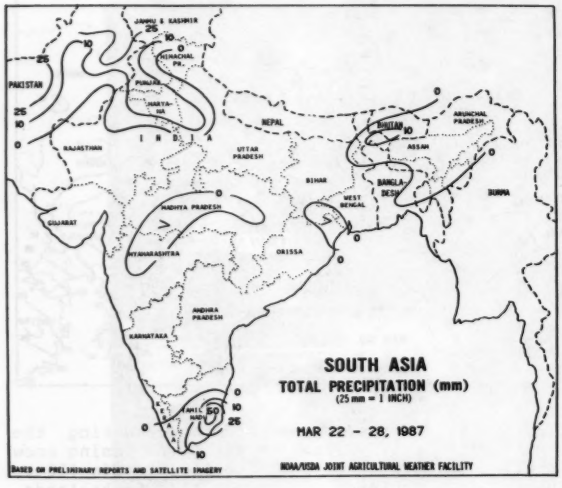
EUROPE ... Temperatures moderated during the week, with most winter grain areas losing snow cover. Mild weather and significant rain (16 to 50mm) in England, France, the Netherlands, Belgium, West Germany, Italy's Po Valley, eastern Yugoslavia, western Romania, and Bulgaria helped to promote the greening of winter wheat and increase soil moisture for spring planted crops. Winter grains remained dormant throughout the rest of Eastern Europe. In Spain, insufficient moisture covered southern winter grains entering the heading stage. Southern Spain's dry weather has persisted for the past 4 weeks, and rain is needed soon to prevent significant crop stress.



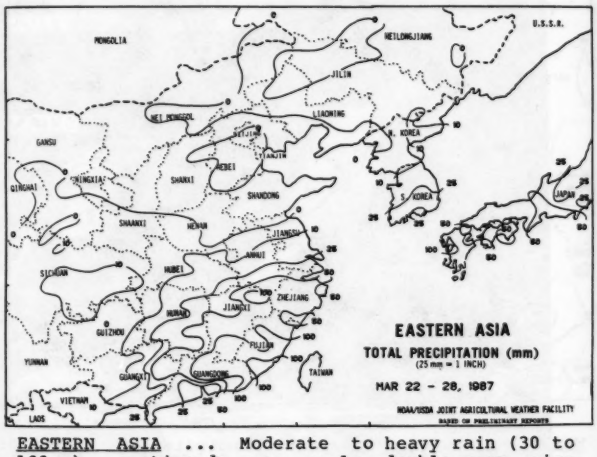
NORTHWESTERN AFRICA ... Winter grains over the region were entering the heading stage. Earlier planted crops likely were flowering. Unfavorable dry weather continued over Morocco's winter grain areas, causing crop conditions to deteriorate. Insufficient moisture covered winter grains in western and central Algeria, and crops had to rely on limited soil moisture reserves to meet increasing crop moisture requirements. In northeastern Algeria and northern Tunisia, light showers maintained favorable moisture conditions for crop growth.



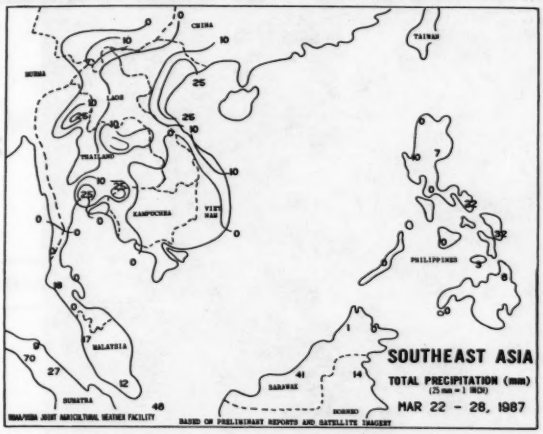
SOUTH AFRICA ... Moderate to heavy showers (25 to more than 100mm) benefited grain-filling corn in the northern Orange Free State and southern Transvaal, South Africa's primary corn regions. However, corn in some areas of the Maize Triangle is maturing and did not benefit greatly from the rain. In fact, harvesting likely is underway in some early-planted regions of the Maize Triangle. Lighter rain (4 to 25mm) in the northern Transvaal and southern Maize Triangle improved moisture conditions somewhat for grain-filling corn, but these areas had experienced hot, dry periods earlier in the reproductive cycle. Harvesting usually lasts from early-April to late-July.



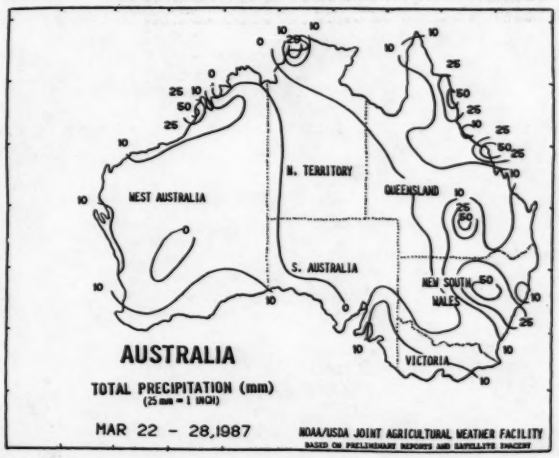
SOUTH ASIA ... Showers (8 to 37mm) continued in northern Pakistan and northern India, maintaining favorable irrigation supplies for grain-filling wheat. Light rain (less than 7mm) may have interrupted wheat harvesting in central India. Mostly dry weather covered the heavily irrigated summer rice crop in southeast India. Summer rice is advancing normally through reproduction.



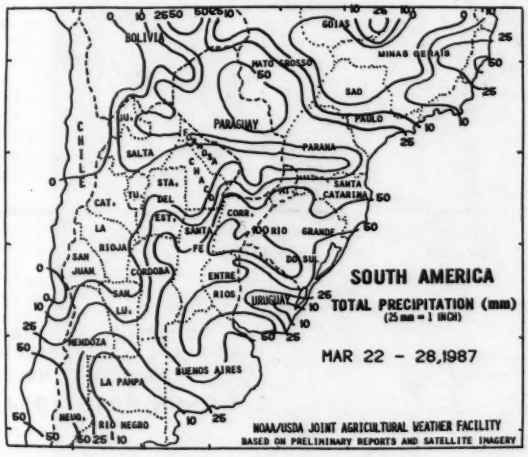
EASTERN ASIA ... Moderate to heavy rain (30 to 100mm) continued over early double-crop rice areas in eastern Guangxi, Guangdong, eastern Hunan, Jiangxi, Fujian, and Zhejiang, lessening the need for irrigation. Moisture for early rice planting is adequate to abundant in most areas, and inundative rain in Guangdong and southern Jiangxi the past 2 weeks may have washed out some rice fields requiring replanting. Light showers (10 to 21mm) in southern Sichuan increased topsoil moisture for corn planting, which likely is off to a slow start due to earlier dryness. In the North China Plain, dry weather covered winter wheat in the vegetative stage, and rain is needed to meet increasing crop moisture requirements. Weekly temperatures in the North China Plain were near normal.


SOUTHEAST ASIA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
MAR 22 - 28, 1987
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

SOUTHEAST ASIA ... Scattered, variable showers (4 to 48mm) improved moisture conditions in northeast and northern Thailand for the upcoming planting of rainfed rice and corn. However, minimal rain (less than 6mm) persisted in eastern Thailand's rainfed crop regions. Light rain (less than 11mm) covered the Philippines, but much more will be needed for upland rice and corn planting, normally underway by April. Mostly light rain (less than 17mm) covered western Malaysia as moderate to heavy showers continued in Indonesia.



AUSTRALIA ... Moderate to heavy showers (10 to 64mm) continued in New South Wales, benefiting filling grains and cotton. Drier weather continued in southeast Queensland's summer crop areas as temperatures averaged in the mid-20's (degrees C). Below-normal rainfall and above-normal temperatures since early-February have resulted in limited moisture reserves for unirrigated grains nearing maturation. Moderate showers (21 to 99mm) along Queensland's coast improved moisture conditions somewhat for sugarcane. Moisture reserves are still low in some southern sugarcane areas due to this season's weak monsoon circulation in northern Australia.


SOUTH AMERICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
MAR 22 - 28,1987
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

SOUTH AMERICA ... Widespread rain interfered with summer crop harvesting in Argentina's major crop areas and in Brazil's Rio Grande do Sul and southern Mato Grosso do Sul. Locally heavy showers generally produced 40 to 85mm throughout these areas with inundative rain (100 to 200mm) in southern Corrientes, Argentina and along the border of Rio Grande do Sul, Brazil and Uruguay. Shower activity diminished late in the week. Some rain (10 to 39mm) fell in Parana, providing some beneficial moisture to immature soybeans and corn following a long hot, dry spell. Mostly dry weather prevailed in western Sao Paulo, southwestern Minas Gerais, southern Goias, and extreme eastern Mato Grosso do Sul. Weekly temperatures again averaged near to slightly above normal. In general, harvest progress likely was slowed by wet field conditions over much of the region.

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